

**Do African country investment plans mitigate high food prices
through improved household risk management?
A five-country comparative analysis**

Mjabuliseni S C Ngidi

December 2012

Submitted in fulfilment of the degree of
Doctor of Philosophy (Food Security),
African Centre for Food Security,
School of Agricultural, Earth and Environmental Sciences,
College of Agriculture, Engineering and Science,
University of KwaZulu-Natal,
Pietermaritzburg

ABSTRACT

Staple food prices rose sharply in 2007/2008, dropped slightly after July 2008, and rose again in 2010/2011. Since 2008, food prices have remained high, indicating a structural upward adjustment in food prices amidst excessive price volatility. The 2008 food price increases led to considerable media coverage and alarm among governments who implemented a variety of responses to protect their populations from food insecurity.

At the start of the high food price crisis in May 2008, the African Union and New Partnership for Africa's Development (AU/NEPAD) invited 16 African countries to a workshop in South Africa. The aim of the workshop was to assist selected African countries identify and formulate appropriate plans to mitigate food insecurity and manage rising food prices.

This study set out to investigate whether the strategies implemented by national governments at the start of the crisis mitigated high food prices through improved risk management strategies in five African countries (Ethiopia, Kenya, Malawi, Rwanda and Uganda) and evaluated these strategies to see if they were included in the national agriculture and food security investment plans. To achieve this, the study set out to explore four sub-problems, namely:

- *What was the impact of high food prices on populations in the five selected countries (Ethiopia, Kenya, Malawi, Rwanda and Uganda)?*
- *How did the five countries respond to the 2008 food price crisis with regard to providing for immediate needs and protecting vulnerable groups from food insecurity?*
- *How many early actions were included in country compacts and agriculture and food investment programmes?*
- *Do country investment plans include household risk management programmes that will protect vulnerable groups against high food prices in future?*

The involvement of the researcher in the AU/NEPAD workshop and his subsequent engagement with national government representatives provided a unique opportunity to analyse the iterative process of Country Investment Plan (CIP) development. This innovative and largely qualitative study integrated comparative, content and thematic analysis

approaches, using the four elements of the Comprehensive Africa Agricultural Development Programme's (CAADP) Framework for African Food Security (FAFS) to analyse the national plans. The study drew on available data from a wide variety of national, regional and international documents. Additional data were collected through a survey questionnaire completed by CAADP country focal persons. Data sourced from documents included Food Price Indices, country policy responses to high food prices, poverty and malnutrition indicators and the types of risk management strategies designed under CAADP.

The study found that food prices increased across all five countries between 2007 and 2008, although the effects of the increases varied, being influenced by, among other factors, the proportion of national stocks purchased on the international market (i.e. net importers of staple crops), the availability of substitute staples on the domestic market and the magnitude of the difference between international and domestic market prices. The 2008 food price increases forced populations to spend a higher proportion of their income on food and eroded their purchasing power, impacting on the food security of these populations. Poor people adopted eroding consumption strategies that increased food insecurity. The impact of the high food prices on populations was determined by whether they were net food buyers or producers, the mix of staple commodities in their food basket and the proportion of income spent on food. As poor net food importing countries, imported staple foods became too costly, except in Uganda - a net exporter of food staples consumed in the surrounding countries. High food prices also provoked social unrest in Ethiopia and exacerbated political and economic instability in Kenya.

Countries' early responses to the food price crisis were varied and included responses that can be classified into three main categories, namely:

- Trade-oriented responses protected domestic stocks, reduced tariffs, restricted exports to reduce prices for consumers or increased domestic supply*
- Consumer-oriented responses provided direct support to consumers and vulnerable groups in the form of, among others, food subsidies, social safety nets, tax reductions and price controls*
- Producer-oriented responses provided incentives for farmers to increase production - using measures such as input subsidies and producer price support.*

Most responses were aimed at managing prices, suggesting that governments tried to protect citizens from price increases and buffer consumption reduction. Safety net programmes mitigated risks through the provision of food for immediate consumption. As a result, malnutrition levels unexpectedly decreased or remained static in these five countries, despite expectations and media claims that the number of hungry people would increase significantly.

The early actions from the food price workshop plans were generally systematically translated into long-term programmes in the Compacts and Country Investment Plans. In Ethiopia, seven of eight early action plans were translated into the CIP, Kenya included three of eight, Malawi's CIP included four of ten, and Rwanda included six of its ten early actions in their CIP programme, while Uganda included only six of thirteen early actions in their CIP.

The study found that CIPs included risk management strategies, but these focused predominantly on improving early warning systems and crisis prevention. The risk management options largely included options for improving crisis prevention, followed by improving emergency responses and strengthening risk management policies and institutions. Only Kenya's CIP included more risk management options for improving emergency responses – four of six risk management programmes. Despite expectations that programmes developed under CAADP FAFS would include all FAFS elements, CIPs lacked programmes to improve dietary quality. Only Rwanda's CIP included nutrition programmes - three of six programmes in their CIP.

The study concluded that while the proposed risk management strategies could mitigate risks associated with high food prices and offer some buffer for populations from food insecurity, the programmes are not comprehensive. The plans were generally weak regarding improving dietary quality through diversification of food consumption and production. Although the CIPs included risk management strategies, these strategies would not address risks in a comprehensive manner. More effective and coherent actions are still required to help the most food insecure populations cope with increasing high food prices and future price shocks; help developing country farmers respond to the opportunities offered by the rising demand for their products; and bring more stability in prices.

The early food price response workshop seems to have influenced the development of programmes in the CAADP compact and CIPs, despite the fact that the workshop did not intend to assist countries with the development of comprehensive national investment plans. The large funding gaps in the CIPs constrain implementation of essential mitigation and development strategies and could leave countries vulnerable to the negative impacts of higher prices for consumers and threaten future household food security.

The study recommends that countries invest in agriculture-led growth to boost domestic production and strengthen institutional capacities regarding national food stock reserves to reduce their dependency on imports and ensure food insecurity. National monitoring and evaluation systems need to be strengthened to evaluate and monitor the implementation of CIPs and to warn about future high food prices. Empirical estimation of the impact of price increases on households across all CAADP countries is needed to understand and monitor the impact of price changes and interventions.

DECLARATION

I, Mjabuliseni S C Ngidi declare that:

- (i) The research reported in this thesis, except where otherwise indicated, is my original research
- (ii) This thesis has not been submitted for any degree or examination at any other university
- (iii) This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from those persons
- (iv) This thesis does not contain other authors' writing, unless specifically acknowledged as being sourced from other authors. Where other written sources have been quoted, then:
 - a) Their words have been rewritten but the general information attributed to them has been referenced
 - b) Where their exact words have been used, their writing has been placed inside quotation marks and referenced
- (v) This thesis does not contain text, graphics or tables that have been copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the references sections.

Signed:.....Date.....

Mjabuliseni S C Ngidi

As supervisor, I agree to submission of this thesis for examination.

Signed:.....Date.....

Prof Sheryl L Hendriks

As co-supervisor, I agree to submission of this thesis for examination.

Signed:.....Date.....

Prof Gerald F Ortman

ACKNOWLEDGEMENTS

I acknowledge the assistance of the following people. Without their help, this work would not have been possible:

- God for being the pillar of my life and my family for their valuable support.
- Professor Sheryl Hendriks (Director: University of Pretoria's Institute for Food, Nutrition and Well-being) for her supervision, knowledge, guidance, ideas, and enthusiastic support and financial assistance through National Research Foundation grants TTK200705000011 and IFR201140700044.
- Professor Gerald Ortman, Academic Leader of the Value Adding Cluster and Professor of Agricultural Economics: School of Agricultural, Earth and Environmental Sciences at the University of KwaZulu-Natal, for his co-supervision and guidance.
- Professor Richard Mkandawire (Director: New Partnership for Africa's Development Planning and Coordinating Agency's Partnerships, Resource Mobilisation and Communication) for his words of encouragement and belief in me.
- The National Research Foundation (grant number: SFH2008072800045), DAAD & the UKZN Scholarship Committee for their funding towards the completion of this thesis.
- The opportunities provided through the International Food Policy Research Institute's support for the development of the Framework for African Food Security implemented with United States Agency for International Development/Department for International Development/Swedish International Development Agency funds.
- Mr and Mrs Breedt for support throughout my high school and University life.
- The University of Pretoria for giving me a space to work and complete this thesis and Dr Bev Saone at the University KwaZulu-Natal for editing the thesis.
- All research participants, including CAADP focal point persons and country representatives from the early food price workshop for the valuable information provided.
- The Department of Student Housing, especially Mr Mdukhy Mabaso, for offering me part-time work and support throughout my postgraduate life at the University.
- My colleagues at the African Centre for Food Security at the University of KwaZulu-Natal and University of Pretoria's Institute for Food, Nutrition and Well-being for encouragement, support and ideas offered.
- My friends (including but not limited to: Sbo Zondi, Sindi Mkhize, Angel Ndlovu, Wezi Chunga, Jolly Masoke, Thulile Dlamini, New Gen Church and my cell group) for listening to my problems and support and encouragement they have given me throughout this research.
- Mr Brendan Boyce and Mrs Anusha Maikoo for their tireless administrative support.

TABLE OF CONTENTS

<i>ABSTRACT</i>	i
DECLARATION	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS.....	vii
LIST OF ACRONYMS	ix
LIST OF FIGURES	x
LIST OF TABLES	xi
CHAPTER 1: THE PROBLEM AND ITS SETTING	1
1.1 Introduction to the research problem	1
1.2 Importance of the study.....	4
1.3 Statement of the research problem.....	6
1.4 Study limits	7
1.5 Study assumptions.....	7
1.6 Organisation of the thesis.....	8
CHAPTER 2: REVIEW OF RELATED LITERATURE.....	9
2.1 Introduction	9
2.2 The concept of food security and insecurity	10
2.3 The food (in)security situation in Africa.....	12
2.4 The causes of food insecurity in Africa	14
2.5 The staple foods in the study countries	15
2.6 The role of agricultural growth in food security	16
2.7 The global food crisis.....	17
2.7.1 The 2007/08 high food price trends in Africa.....	19
2.7.2 The drivers of the 2007/08 global food price increases.....	21
2.7.3 Transmission of global food prices to domestic markets.....	23
2.7.4 The impact of high food prices on the poor and African governments	24
2.7.5 How do people cope with long-term high food price crisis?.....	25
2.8 African governments' policy responses to the 2007/08 high food prices.....	27
2.9 Summary of the literature review	32
CHAPTER 3: INTRODUCTION TO NEPAD, CAADP AND FAFS.....	34
3.1 The New Partnership for Africa's Development (NEPAD).....	34
3.2 The Comprehensive Africa Agriculture Development Programme.....	35
3.2.1 The CAADP country implementation process	40
3.3 The CAADP Pillar III	45

3.4	The Framework for African Food Security (FAFS).....	45
3.4.1	Operational plan for CAADP’s FAFS	49
CHAPTER 4: STUDY METHODOLOGY		51
4.1	Background to the AU/NEPAD’s early high food price workshop	51
4.2	Country selection for the current study	52
4.3	Methodological approach.....	53
4.4	Documents and data collection	55
4.5	Data analysis	58
CHAPTER 5: RESULTS AND DISCUSSION.....		61
5.1	The impact of high food prices in five selected countries.....	61
5.2	Country responses to the 2008 food price crisis regarding provision for immediate needs and protecting vulnerable groups from food insecurity	67
5.2.1	Country interventions and their impact in terms of poverty and malnutrition reduction	72
5.3	Translation of early action plans into CAADP compacts and CIPs.....	78
5.3.1	Translation of early food price actions into Compact and CIP in Ethiopia	78
5.3.2	Translation of early food price actions into Compact and CIP in Kenya	80
5.3.3	Translation of early food price actions into Compact and CIP in Malawi	82
5.3.4	Translation of early food price actions into Compact and CIP in Rwanda	83
5.3.5	Translation of early food price actions into Compact and CIP in Uganda	85
5.3.6	Synopsis of the translation of early actions into CAADP compacts and CIPs..	86
5.4	Country investment plans and inclusion of risk management strategies	87
5.4.1	Inclusion of risk management strategies in the Ethiopia CIP	88
5.4.2	Inclusion of risk management strategies in the Kenya CIP	91
5.4.3	Inclusion of risk management strategies in the Malawi CIP	93
5.4.4	Inclusion of risk management strategies in the Rwandan CIP	95
5.4.5	Inclusion of risk management strategies in the Uganda CIP	97
5.4.6	Synopsis of inclusion of risk management strategies in the CIPs	99
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS.....		102
6.1	Conclusions	106
6.2	Policy recommendations	108
6.3	Recommendations for further study.....	110
REFERENCES		111
APPENDICES		133

LIST OF ACRONYMS

AAMP	Africa Agricultural Markets Programme
ACFS	African Centre for Food Security
AfDB	African Development Bank
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Programme
CGIAR	Consultative Group on International Agricultural Research
CPI	Consumer Price Index
CFS	Committee on World Food Security
CILLS	Permanent Interstate Committee for Drought Control in the Sahel
CIPs	Country Investment Plans or Programmes
COMESA	Common Market for Eastern and Southern Africa
DFID	Department for International Development
ECOSOC	Economic & Social Council
ECOWAS	Economic Communities of West African States
FAFS	Framework for African Food Security
FAO	Food & Agriculture Organisation
GHI	Global Hunger Index
FPI	Food Price Index
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
NEPAD	New Partnership for Africa's Development
OECD	Organisation for Economic Co-operation and Development
PAAP	Policy Analysis and Advocacy Programme
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
SIDA	Swedish International Development Agency
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WFP	World Food Programme

LIST OF FIGURES

Figure 2.1: International prices of key food crops	18
Figure 2.2: Annual food grain prices, 1960-2020	19
Figure 3.1: Summary of the CAADP process	41
Figure 3.2: The CAADP country process cycle	42
Figure 3.3: Framework for African Food Security (FAFS) score card.....	49
Figure 5.1: Uganda CIP's contribution to FAFS elements, 2011	62
Figure 5.2: Sources of funding for the CIPs.	101

LIST OF TABLES

Table 2.1: African countries and sub-region (s) on track to meet MDG one target(s)	12
Table 2.2: Increases in food prices over March 2007 to March 2008	20
Table 2.3: Summary of possible drivers of the 2007/08 high food prices	22
Table 3.1: Consultative process for the preparation and evolution of CAADP.....	36
Table 3.2: The CAADP Pillar III Principles	46
Table 3.3: FAFS objectives.....	48
Table 4.1: Overall outline of research methodological approach, 2011	56
Table 4.2: Sources of data and information used for in the study	57
Table 4.3: FAFS framework or options for addressing household risk management	60
Table 5.1: Summary of the import share of major food staple	63
Table 5.2: Monthly price changes and contribution to the cost of the typical food basket between August 2007 and August 2008 by country and commodity	64
Table 5.3: Expenditure on food as a percentage of total household expenditure	66
Table 5.4: Synthesis of policy responses to high food prices in 2007/08 in Ethiopia, Kenya, Malawi, Rwanda and Uganda	69
Table 5.5: Comparative analysis of poverty* and malnutrition levels from the study countries	73
Table 5.6: Ethiopia's programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010	79
Table 5.7: Kenya's programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010	81
Table 5.8: Malawi's programmes indicated in the early food price response workshop, CAADP compact and CIPs, 2010.....	83
Table 5.9: Rwanda's programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010	84
Table 5.10: Uganda's programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010	86
Table 5.11: Ethiopia CIP's contribution to FAFS elements, 2011	89
Table 5.12: Kenya CIP's contribution to FAFS elements, 2011	92
Table 5.13: Malawi CIP's contribution to FAFS elements, 2011.....	94
Table 5.14: Rwanda CIP's contribution to FAFS elements, 2011.....	96
Table 5.15: Uganda CIP's contribution to FAFS elements, 2011	98

CHAPTER 1: THE PROBLEM AND ITS SETTING

1.1 Introduction to the research problem

Following a long-term reduction in real prices of foods between 1974 and 2005, the trend was reversed by sudden global food price increases that began in 2005 and reached a peak in mid-2008 (Wodon and Zaman, 2008). The world had not experienced a food crisis of such magnitude (Food and Agriculture Organisation (FAO), 2008a and 2009a; Obayelu, 2011). Between January 2005 and mid-2008, food prices increased by an average 83 per cent, precipitating a global food crisis that reportedly increased poverty and hunger, especially in Africa (de Janvry and Sadoulet, 2009; von Braun, 2008a).

The 2008 global price crisis created considerable panic among developed and developing countries alike (Economic and Social Council (ECOSOC), 2009; FAO, 2011a; Kamara *et al.*, 2009; von Braun, 2008a). Although the period following the 2008 global food price crisis saw a gradual decline in food prices (but not back to pre-2008 levels), sharp increases in the prices of selected commodities, such as wheat, maize, sugar and edible oil, occurred again in 2009/2010 (FAO, 2011a). The FAO Food Price Index for January 2011 averaged 231 points and this was the highest level (both in nominal and real terms) since FAO started measuring food prices in 1990 (FAO, 2011a).

The 2008 high food price crisis was unusual for a number of reasons. First, globalisation meant that the impact was universal (although not felt evenly across the globe). Second, the world was taken by surprise, despite considerable advances in early warning and emergency preparedness systems (Hendriks and Drimie, 2010). Third, unlike previous crises, the 2008 crisis was not the result of typical covariant shocks that affect food supplies (although irregular weather patterns led to poor harvests in some areas). Instead, it was caused by a complex combination of factors. Fourth, unlike the previous food crises where the prices of only a few commodities were affected, the 2007/08 price increases affected most food commodities, including cereals, oilseeds, dairy products and meat (African Union/New Partnership for Africa's Development (AU/NEPAD), 2010; FAO, 2008a; FAO, 2011a; Headey *et al.*, 2009; United Nations, 2010a).

Global commodity price increases tailed off in 2009, but prices have remained high compared with earlier years. For example, Wodon and Zaman (2009) reported that in April 2009, the World Bank Food Grain Price Index was still almost twice that of the five-year average leading up to June 2007. This index fell by 40 per cent between June and December 2008, but rose again by 13 per cent between January and April 2009 (Wodon and Zaman, 2009), demonstrating considerable price volatility (Wodon and Zaman, 2009). Price volatility refers to relative fluctuations or changes in food prices (Minot, 2011:4).

High food prices raise concerns about the food security and nutrition situation of people around the world - especially the poor living in developing countries (Benson *et al.*, 2008a; Caperhart and Richardson, 2008; Minot, 2011; Obayelu, 2011). It is estimated that higher food prices pushed an additional 40 million people into hunger in 2008 (Food and Agriculture Organisation (FAO), 2008a), raising the overall number of undernourished people in the world to 963 million in 2008, compared with 923 million in 2007 (FAO, 2008a). Rising food prices provoked social unrest across the developing world and resulted in the implementation of a number of short-term policy responses from governments, exacerbating instability in world markets (Torero, 2011; FAO-IFAD-WFP, 2008).

High food prices affect the poor, developing country governments and development aid agencies. The purchasing power of the poor is eroded by price shocks - limiting their ability to access food from the market. This is because the poor rely on the very staples that became too costly, forcing them to reduce their non-food expenditure and shift to cheaper foods (Minot, 2011; Torero, 2011; von Braun (2008b). IFPRI (2008) noted that the food crisis has also eroded the gains of the working and middle classes. The governments of low-income countries are also very susceptible to high food prices; as import bills increase, the demand for safety net programmes increases and political unrest limits their capacity to respond to food price shocks (World Bank, 2008a). Aid agencies also experienced the impact of high food prices, facing increased demand for food aid (AU/NEPAD, 2008a and 2008b). For example, when food prices are high, the World Food Programme's (WFP) ability to access food becomes limited due to budget ceilings.

Overall, the increase in food prices threatened Africa's progress towards achieving the Millennium Development Goals (MDGs) (Fan and Rosegrant, 2008; Yu *et al.*, 2010). The high food prices threaten, in particular, the achievement of MDG one, which aims to reduce extreme poverty and hunger by half by 2015 (Badiane and Ulimwengu, 2009; Fan and

Rosegrant, 2008; United Nations, 2007; Yu *et al.*, 2010; Zimmermann *et al.*, 2009). The United States Agency for International Development (USAID) (2009) reported that more than 17 million people faced food insecurity in 2008 due to the combined effects of low harvest, conflict and high food prices.

Estimates by IFPRI indicate that better policy and investment strategies, leading to higher labour productivity, could mitigate high food prices, contribute to food security and reduce the proportion of undernourished children in Africa (Rosegrant *et al.*, 2005). International evidence shows that agriculture plays a key role in poverty alleviation, stimulating economic growth and reducing poverty and hunger (Fan and Rosegrant, 2008). Without an agricultural revolution, developing countries remain trapped in poverty, hunger and economic stagnation (IFPRI 2007). Agricultural growth plays a key role in addressing high food prices and contributing to overall economic growth and food security (Badiane, 2009; Fan and Rosegrant, 2008).

The AU/NEPAD has provided a unique strategic framework for boosting agricultural growth, productivity and risk management to address food insecurity in Africa. The Comprehensive Africa Agricultural Development Programme (CAADP) is a strategic framework to guide countries' development efforts and partnerships. CAADP provides a framework for strengthening and broadening inclusive planning to address poverty, hunger, food insecurity and food price crises in Africa through the development of country investment plans. The introduction of the CAADP agenda in a country is not the introduction of a new intervention, but a reminder to the government and partners of NEPAD and CAADP objectives to which they are already committed by having signed the agreement (Kolavalli *et al.*, 2010).

The CAADP framework identifies four complementary pillars central to achieving the required growth in agriculture to reduce poverty and hunger (AU/NEPAD, 2009a & 2005; Hendriks and Drimie, 2010). These pillars are:

- *Pillar 1*: Extending the area under sustainable land management and reliable water control systems;
- *Pillar 2*: Improving rural infrastructure and trade-related capacities for market access;
- *Pillar 3*: Increasing food supply, reducing hunger and improving responses to food emergency crises

- *Pillar 4*: Improving agriculture research, technology dissemination and adoption.

In summary, high food prices have necessitated a re-assessment of food security and agriculture policies and programmes pursued by African governments, donors and international institutions (Mousseau, 2010). Following the 2007/2008 high food prices, it was important for African governments to put in place appropriate policies and programmes to ensure progress in the fight against food insecurity. Considering that projections are that food prices are likely to remain high in the next few years, it is important that studies of high food prices are undertaken in order to inform policy responses and interventions against price increases (FEWS NET, 2011; Timmer, 2011). This will help governments mitigate the impact of persistently high prices and future price increases.

1.2 Importance of the study

The 2008 food price increases led to considerable media coverage and alarm among governments (Hendriks, 2010). Governments faced a desperate need for rapid action with little and conflicting empirical evidence to inform their policy responses as the food price crisis unfolded (Hendriks, 2010; Torero, 2010). Consequently, African governments hastily implemented mitigating measures to protect domestic prices and mitigate the impacts on food insecure groups (FAO, 2011a; Chirwa, 2009; Okello, 2009). Some governments' actions stabilised food prices (like social protection programmes), while other policy actions (like export bans and food price control) made food prices more volatile and distorted trade (FAO, 2011a; von Braun, 2008a).

While the short-term impact on poor households required immediate attention, this may have been a turning point that required bold policy actions in addressing long-term structural challenges (Barungi *et al.*, 2011). There was an opportunity for countries to adopt innovative food security and agricultural policy responses. The continued price increases required that social protection and agricultural or food security measures became the centre of national government programmes and policies in Africa (Barungi *et al.*, 2011). Therefore, it is not surprising that policy-makers in Africa have, over time, implemented a wide range of policies and programmes to stabilise the price of staple food grains (Minot, 2010a).

The crisis demonstrated the fragile nature of food systems and the changing nature of food security amidst increasing proportions of net buyers of staple commodities at household and national levels (Hendriks, 2010). Food shocks harm marginalized and vulnerable groups more deeply than other segments of the population, while simultaneous increases in energy costs put increased pressure on household budgets. Consumers who spend a relatively large share of their income on food, are likely to be poor and be pushed deeper into poverty and food insecurity as prices rise (Bryngelson *et al.*, 2010; Wodon and Zaman, 2009; FAO, 2008b and 2008c). Failure to act quickly to establish supportive measures for agricultural growth and rural development could lead to a significant increase in the number of people in need of emergency assistance, as well medium and long-term food assistance (FAO, 2011a; FAO-IFAD-WFP, 2008; von Braun, 2008a).

High food prices could stimulate a supply side response, transmitting market signals to food producers and increase production (ASARECA, 2008; FAO, 2011a; FAO-IFAD-WFP, 2008; von Braun, 2008a). This may offer an important opportunity for promoting agricultural and rural development in many low-food deficit countries (i.e. poor and net importers of food). However, this will require an enabling policy environment and supportive measures, such as improved infrastructure and stronger institutional arrangements (von Braun, 2008a).

The food price crisis highlighted the need for increased investment in African agriculture to increase the supply of food (von Grebmer *et al.*, 2008). High rates of poverty, hunger, undernutrition, and food aid dependency mean that African consumers were exceptionally vulnerable to increases in food prices (Diao *et al.*, 2008; United Nations, 2008). However, sound national policy and programme choices are based on empirical data (Hendriks, 2010). More effective and coherent action was required to help the most vulnerable populations cope with increased food prices; help developing country farmers respond to the opportunities offered by the rising demand for their products; and bring more stability to highly volatile prices (von Braun, 2008c).

The food crisis illustrated deficiencies in the information available for guiding policy responses at global and national levels (Hendriks and Drimie, 2010; Hendriks *et al.*, 2009a). Sound information systems are able to provide timely information and predict future shocks for governments. These information systems help governments make wise decisions in response to rapidly changing situations to continually review the impact of any response.

The 2008 CAADP conference indeed offered an interesting an interesting window into public decision making in the presence of political and economic stresses. The timeliness of the CAADP FAFS and the May 2008 planning conference offered interesting lessons for African governments and policy makers alike.

1.3 Statement of the research problem

High food prices remain a challenge in African countries and threaten the welfare of African people. This has forced governments to take rapid actions to protect their populations. In the wake of the 2008 food price crisis, the AU/NEPAD and Development Partners (DPs) organised a workshop in May 2008 to assist African countries identify practical country-level mitigation actions to manage the crisis and respond to its impacts. The AU/NEPAD's 2008 high food price workshop was an important milestone in building a coordinated African response to high food prices within the framework and principles of CAADP - and the CAADP FAFS in particular.

In this context, the study set out to determine whether selected African country actions mitigated high food prices through improved risk management strategies, and investigated if these early actions were included in country agriculture and food security investment plans developed under CAADP. The study was organised around four sub-problems.

Sub-problem 1: What was the impact of high food prices on populations in the five selected countries (Ethiopia, Kenya, Malawi, Rwanda and Uganda)?

Sub-problem 2: How did the five countries respond to the 2008 food price crisis with regard to providing for immediate needs and protecting vulnerable groups from food insecurity?

Sub-problem 3: How many early actions were included in country compacts and agriculture and food investment programmes?

Sub-problem 4: Do country investment plans include household risk management programmes that will protect vulnerable groups against high food prices in future?

1.4 Study limits

Although 16 African countries were invited to the AU/NEAD high food price workshop, this study focused on five Anglophone countries that participated in the workshop, had signed their CAADP country compact and had elaborated a country investment plan by December 2010. Although Sierra Leone met the criteria, this country was excluded as it was the only West African country. For comparative purposes, the study was confined to the five Eastern and Southern African countries (i.e. Ethiopia, Kenya, Malawi, Rwanda and Uganda). For this reason, the results cannot be generalised to other African countries. Although the CIPs are comprehensive agriculture and food security plans, intended to include elements for all four CAADP pillars, this study focused on CAADP Pillar three-related elements only. While it is recognised that excessive price volatility continues to plague the global food security situation, this study does not focus on price volatility.

1.5 Study assumptions

It was assumed that both African and international organisations would agree to share their data regarding the food prices and that data sourced through questionnaires and from other sources was authentic and credible enough to draw conclusions from. The study assumed that if CIP design and development was guided by FAFS, household risk management strategies would be included.

It was assumed that the early food price actions, Compacts and CIPs acted as authoritative sources of information and reflected the total package of actions implemented by African governments to address food security in-country. It was recognised that some sectors (perhaps by Ministries outside of the agricultural sector) may have implemented response actions and policy changes in 2008 and the following food price crisis period, but the study focused on CAADP-related actions and so relied on CAADP documents and sources of information in the analysis.

It was assumed that the CAADP FAFS is an authoritative framework – setting out valid and useful guidelines for ensuring food security in African countries and was appropriate for guiding the actions needed in mitigating the impacts of the high food price crisis. FAFS was developed during 2007, ahead of the food price crisis. The Framework was developed

through a consultative process that considered an intensive international literature review, expert opinions and the outcomes of consultations with African governments, the multinational and international community. It was validated through an international workshop hosted by the AU/NEPAD and the CAADP Development Partners in February 2008.

1.6 Organisation of the thesis

Chapter one outlines the background to the research problem, the importance of the study, statement of the research problem, sub-problems, study limitations and assumptions. Chapter two reviews literature on food (in)security in Africa, the causes of food insecurity in Africa, the role of agricultural growth in food security and the global high food price crisis. Chapter three provides insight into the purpose and nature of CAADP and FAFS. Chapter four describes the methodology employed in this study. Chapter five reports and discusses the findings. Finally, chapter six presents the study conclusions and recommendations.

CHAPTER 2: REVIEW OF RELATED LITERATURE

2.1 Introduction

At the World Food Summit in 1996, 186 members of states and governments resolved to eradicate poverty through enhanced agricultural production (United Nations, 1997). This commitment was reinforced at the Millennium Assembly 2000, where the Millennium Development Goals were refined and governments committed to eradicate extreme poverty and hunger by 2015 (FAO, 2005). Yet, millions of people around the world are still food insecure and hungry (United Nations, 2010). In fact, in least developed countries, particularly in Africa, the absolute number of people living in poverty has increased as a result of population growth (Fan, 2010; Omilola and Lambert, 2009). The 2008 and 2012 Global Hunger Index showed that the near East and North Africa have made significant progress in combating hunger and malnutrition since 1990, but not Sub-Saharan Africa, where hunger and malnutrition remain high (von Grebmer *et al.*, 2012 and 2008).

Global food prices rose sharply in 2007/08 relative to earlier trends, reaching a peak in mid-2008 (Wodon and Zaman, 2009). What was unusual about the 2008 food crisis was its universality and the fact that governments were taken by surprise, despite considerable advances in early warning systems and emergency preparedness (Hendriks, 2010). The high food prices, exacerbated by protectionist trade bans implemented by panicking governments, meant that having the money to purchase could not secure national stocks to fill consumption gaps (FAO, 2011a; Hendriks, 2010). While the world was still grappling with understanding the complexity of the 2007/08 food price crisis, prices rose again in 2010/2011 (FEWS NET, 2011). Although the situation was slightly different from 2007/08, escalating fuel prices, persistently high food prices, high price volatility and low stocks were still cause for concern (FAO, 2011a).

In this chapter, the concepts of food security and insecurity are defined. The sections that follow describe the food (in)security situation in Africa, discuss the causes of food insecurity in Africa, the staple foods in the study countries and the role of agricultural growth in ensuring food security. The second part of the chapter discusses the global food crisis and African countries' responses to the crisis.

2.2 The concept of food security and insecurity

A review of food security definitions shows a significant shift in thinking about food security over the past 25-30 years. The concept of food security has evolved through a sequence of definitions and paradigm shifts (Boon, 2004; Clay, 2002), following developments in the understanding of the concept (Clay, 2002; Maxwell, 1996a, 1996b). In 1992, nearly 200 definitions of food security existed (Maxwell, 1996a; Smith *et al.*, 1992).

Concern with food security can be traced back to the world food crisis of 1974 (FAO, 2003; Hoddinott, 1999; Maxwell, 1996b; Saad, 1999) and before that - at least to the Universal Declaration of Human Rights in 1948 which recognised the right to food as a core element of an adequate level of living (FAO; 2003; Olarinde and Kuponiyi, 2005; Saad, 1999; Weingartner, 2009). Food security as a concept emerged at the United Nations Food and Agriculture Organisation (FAO) World Food Conference in 1974 and was first defined in terms of food supply (Clay, 2002; Hoddinott, 1999; Saad, 1999).

In 1974, focus was given to ensuring the availability of basic foods at international and national levels (United Nations, 1975:8). This definition focussed on national self-sufficiency and how much food a country produced (Pinstrup-Anderson, 2009). However, widespread hunger continued in the presence of an adequate food supply, leading to a shift in focus from food supply to food demand in the 1980s (Maxwell, 1996a; Maxwell and Slater, 2003). At this stage, the concept of food security was broadened to include both physical and economic access to food supply, recognising that food emergencies, and even famines, are not only caused by catastrophic shortfalls in food production, but often by a sharp reduction in the purchasing power of specific groups (Hoddinott, 1999; Maxwell, 1996b; Saad, 1999). The meaning of food security again shifted from food supply to food availability and access in the 1983 FAO food security definition (Clay, 2002; FAO, 1996). Sen's (1981) work caused a shift in emphasis to entitlements, with the result that the definition of food security was amended to include the notion of ability to purchase food (Economic and Social Council (ECOSOC), 2009).

The most careful redefinition of food security was negotiated through an international consultation in preparation for the World Food Summit in November 1996. The revised definition reflected a wider recognition of the complexities of the technical and policy issues associated with food security (FAO, 2003), namely that: "Food security exists when all

people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences” (FAO, 1996). The 1996 World Food Summit centred food security on three sub-concepts: food availability, accessibility and utilisation (FAO, 1996), while lately it has included stability of supply as a fourth sub-concept (FAO, 2008d).

Food is available when there are adequate quantities of good quality food that can provide nourishing elements and necessary energy (Khemmarath, 2002). Food availability refers to the supply of food at local, national or international levels (FAO, 1996). Food availability may also refer to a continuous supply of food at both national and household levels (Riely *et al.*, 1999). However, national and regional food availability may not always mean availability at a household level.

Food access refers to the capability of individuals and households to obtain food and addresses the issues of purchasing power and consumption behaviour (FAO, 1996, FAO, 2008d; Saad, 1999). Food accessibility may also be referred to as the ability of households to obtain sufficient food for all members at all times, either through production for own consumption, or through exchange (FAO, 1996). Not only should households and individuals have access to food, but it should also be nutritious and appropriate in terms of quantity and quality (Staatz *et al.*, 2009).

Food utilisation refers to the biological availability of nutrients for use by the human body (Bokeloh and Gerster-Bentaya, 2010; Gross *et al.*, 2000). Sufficient energy and nutrient intake by individuals is the result of good care and feeding practices, safe food preparation and the consumption of diverse foods (FAO, 2008d; Staatz *et al.*, 2009). The ability to use food is associated with health and the ability of an individual to physically consume sufficient quantities and to process the food consumed (Kelly, 2003). Chronic food insecurity is a consequence of structural poverty, while transitory food insecurity is often caused by natural disasters and conflicts. Chronic food insecurity manifests from an inadequate intake of food, caused by an inability to access food over time (Maxwell and Frankenberg, 1992; Saad, 1999). Acute or transitory food insecurity is characterised by sudden reductions in access to food over a relatively short period (FAO, 2008d).

Food stability refers to the continuous assurance of adequate availability and accessibility of food. Food security is realised if all four dimensions are fulfilled simultaneously (FAO,

2008d). Food insecurity refers to the lack of food security, which, in extreme cases, results in hunger (Hendriks, 2011; Hendriks, 2005). At household level, a household is food insecure if it does not have adequate food to maintain an active and healthy lifestyle for all of its members (Dutta *et al.*, 2006). The next section presents the food (in)security situation in Africa.

2.3 The food (in)security situation in Africa

Generally, Sub-Saharan Africa (SSA) has made slower progress towards meeting the first MDG (Badiane, 2009). Yet, in recent times, some countries have made significantly better progress towards attainment of MDG's targets (United Nations, 2010b). Table 2.1 shows the status of countries towards meeting target(s) of MDG one (reduction of hunger and poverty). Three countries (Egypt, Ghana and Mauritania) and one sub-region (North Africa) were on track to meet both elements of MGD one, according to the ReSAKSS 2010 trend report (ReSAKSS, 2011). Several other countries are on track to meet either the poverty or hunger target of MDG one (Table 2.1).

Table 2.1: African countries and sub-region (s) on track to meet MDG one target(s) (adapted from ReSAKSS, 2011)

Countries on track for halving poverty by 2015	Countries on track for achieving MDG one by 2015	Countries on track for halving hunger by 2015
Burkina Faso	Egypt	Algeria
Cameroon	Ghana	Angola
Cape Verde	Mauritania	Benin
Central Africa Republic		Botswana
Ethiopia		Burundi
Guinea		Equatorial Guinea
Kenya		Gambia
Lesotho		Guinea Bissau
Malawi		Mozambique
Mali		Namibia
Morocco		Sao Tome & Principe
Senegal		Tunisia
Swaziland		
Uganda		
Sub-region(s) on track for either: halving poverty; achieving MDG one; or halving hunger by 2015		
Eastern Africa	Northern Africa	

Africa has the highest prevalence of malnutrition in the world and food insecurity and hunger are still widespread (AU/NEPAD *et al.*, 2009a; Benson, 2004; Clover, 2003; United Nations,

2011). In 2003/2004, 24 of the 35 countries facing food emergencies and requiring international assistance were from Sub-Saharan Africa, with 13 million affected people in East Africa alone. In 15 (of 40) Sub-Saharan African countries, between 2000 and 2002, more than 35 per cent of the population was undernourished, while in 12 other countries, including South Africa, less than 20 per cent of the population is estimated to be undernourished (FAO, 2012). More than 41 per cent of people in Sub-Saharan Africa live on less than \$1 per day per person (FAO, 2012).

The number of undernourished people in Africa has almost doubled since 1960s, increasing at approximately the same rate as population growth (FAO, 2006). While almost 33 per cent of Africa's population was undernourished in 2006, this proportion increased to more than 40 per cent in 2011/2012 (FAO, 2012). In West and Southern Africa, the number of undernourished people remained relatively stable during the 1990s, while the situation worsened significantly in Central and East Africa. In seven Sub-Saharan African countries, including Angola, Chad, Congo, Ghana, Malawi, Mozambique and Namibia, the proportion of undernourished people decreased between 1990 and 2001 (FAO, 2006).

Since 1998, there have been around 20 food emergency cases every year in Africa (AU/NEPAD, 2009a; FAO, 2006). The majority of these emergency food situations are attributed to natural calamities, followed by armed conflicts and political unrest. It is not acceptable that a single flood or drought creates a food security crisis. Predictable year-on-year food assistance is required to fill the consumption gap of many populations (Hendriks and Drimie, 2010:11).

Food insecurity in Sub-Saharan Africa is a combination of chronic and transitory-emergency-related food insecurity (ECOSOC, 2009; FAO, 2006). Chronic undernourishment is higher in areas of conflict (FAO, 2006). The Horn of Africa is one of the most food-insecure regions in the world, with 70 per cent of the population in Eritrea and Somalia undernourished (ECOSOC, 2009; FAO, 2012). The combined population of Djibouti, Eritrea, Ethiopia, Somalia, the Sudan and Uganda is 160 million, with 70 million living in areas prone to frequent food shortages (FAO, 2012). Even in normal years, these countries would not have enough food to meet their domestic needs. In four countries, including Eritrea, Ethiopia, Kenya and Somalia, the average per capita Dietary Energy Supply (DES) is significantly less than the minimum requirements (FAO, 2012).

Moreover, close to 60 per cent of the undernourished African people are found in countries affected by conflict. Social and political strife and conflict affects food supply in the conflict countries (AU/NEPAD, 2009a). The poor are affected the most when food supply is irregular because of conflicts, droughts, fluctuations in food prices and seasonality.

2.4 The causes of food insecurity in Africa

The main natural hazard affecting the Horn of Africa is drought (FAO, 2012). Extreme weather events, such as droughts and floods (that have increased in frequency), a range of pests and communicable human and animal diseases, undermine fragile livelihoods and pose direct threats to food security (Hendriks *et al.*, 2009a). Climate variability and shifts are likely to create additional challenges and threats to a range of production systems in future. The world economic down-turn, health hazards, natural catastrophes, civil conflicts, and the lack of income and assets in Africa, also contribute towards households' instability with accessing food (AU/NEPAD, 2009a).

Food supply in Africa is inadequate and erratic, with low agricultural productivity and rapid population growth (AU/NEPAD, 2009a; Kamara *et al.*, 2009). African population growth is the highest in the world (Hendriks *et al.*, 2009b). While the African population grows rapidly, the per capita food production has fallen over the past 50 years (AU/NEPAD, 2009a). Cereal yields have stagnated for the past 45 years and currently average less than one ton per hectare. Livestock has always been a key element in African agriculture and household investment (ASARECA, 2008; Hendriks *et al.*, 2009a). However, livestock production and pastoral livelihoods in Africa face multiple threats related to trans-boundary disease, water shortages and climate change among others related to trade barriers and phytosanitary issues (FAO, 2012; Hendriks *et al.*, 2009a). Per capita fish consumption in Africa is likely to decline due to population pressure, despite increasing international trade (AU/NEPAD, 2009b). Low asset endowments of small farmers combine with endemic livestock diseases to limit animal production, productivity and traction (Benson *et al.*, 2008a). Pastoralists in semi-arid and arid lowland regions are relatively asset-rich in livestock but still remain highly vulnerable.

Population growth also causes food insecurity and puts pressure on natural resources, particularly land and forests, leading to rural-urban migration (FAO, 2012). As the population

grows, lifestyles change and production declines. The urbanisation level also increases coupled with the substitution of local varieties with cheap non-traditional cereals (FAO, 2012; Kamara *et al.*, 2009). These non-traditional cereals became prevalent in the African markets. For example, communities in semi-arid regions that used to grow local grains varieties of sorghum and millet switched to growing short-season maize varieties (Kamara *et al.*, 2009). These new crop varieties, however, continue to fail due to inadaptability to droughts, high input requirements that are not always met, and seasonal shifts (FAO, 2012).

The structure and functioning of food markets in Africa are irregular. Low population density, long distances, poor infrastructure and limited competition in the African market imply high marketing costs, which normally account for over half of the final food costs (Omamo, 1998). Almost half of Africa's population lives on less than US \$1 per day (AU/NEPAD, 2009a). This implies a general inability to effectively express demand for food from market sources. In resource-poor settings, there is often inadequate access to quality and nutritious food, sanitation and safe water, and a lack of knowledge about safe food handling and feeding practices which, in turn, result in food insecurity (AU/NEPAD, 2009a).

One of the root causes of food insecurity in Africa is poverty and, therefore, the inability of African people to gain access to food (FAO, 2006). Even in good years, many households are unable to meet their basic food needs. Over 70 per cent of the poor in Africa live in the rural areas where food insecurity is prevalent (AU/NEPAD, 2009a). Poverty is closely related to the lack of a steady flow of income. Poor households spend a significant proportion of their household expenditure on food by directly purchasing it or producing it (Barungi *et al.*, 2011). Where households produce their own food, cash and transport constraints limit people's ability to purchase farm inputs and market their produce (AU/NEPAD, 2009a).

2.5 The staple foods in the study countries

Cereal productions are the means of livelihood for millions of African households, including Ethiopia, Kenya, Malawi, Rwanda and Uganda, and constitute a major share of the African food basket (Ariga *et al.*, 2010; Haggblade and Dewina, 2010; Minot, 2010b and Rashid, 2010). This therefore highlights the importance of staple foods in the diets of African households. Despite the growing importance of cereals in the African food basket, growth in cereal production in Africa continued to lag behind consumption, particularly for key cereals like wheat and rice (Kamara *et al.*, 2009; ReSAKSS, 2010). This situation is as a result of

declining cereal yields, especially major staples like rice with yields in most African countries almost a third of global averages. However, demand for cereals in Africa has been growing, partly because of population growth but also because of changing tastes in favour of imported varieties. This change in cereal demand creates a pressure on foreign exchange to foot the import bills.

In Ethiopia, cereal production and marketing constitute the single largest sub-sector, accounting for about sixty per cent of rural employment, eighty per cent of the cultivated land, more than sixty per cent of total caloric intake, forty per cent of a typical household's food expenditure and thirty per cent of GDP (Rashid, 2010). Agriculture forms forty-eight per cent of Ethiopia's national GDP and cereals' contribution to the agriculture GDP is sixty-five per cent (World Bank, 2007). In terms of caloric intake, an Ethiopian consumes, on average, 1858 kilocalories (Rashid, 2010). Of the total calorie consumption, four major cereals: maize, wheat, teff and sorghum contribute more than sixty per cent, with maize and wheat representing twenty per cent each. In Kenya, a Kenyan consumes an average of 1183 kilocalories per day. Maize and wheat are the main food staples in Kenya contributing sixty-five and seventeen per cent respectively while beans contribute nine per cent of the total share of caloric intake (Ariga, 2010). In Malawi, maize contributes fifty-four per cent of the total share caloric intake and 2125 kilocalories are consumed, on average, by a Malawian per day (Minot, 2010b). Contrary to other study countries, plantains and cassava are the most important staple foods in Uganda (Haggblade and Dewina, 2010).

In summary, in eastern and southern Africa, maize is the most important staple food, followed by cassava, sorghum, teff, wheat, plantains, and sweet potatoes, with the importance of each varying by country. The importance of these staple foods cannot be underestimated, as they contribute 50-75% of the caloric intake of the population (African Agricultural Marketing Programme (AAMP), 2010). Furthermore, staple foods represent a large share of food spending, which is itself 40-70% of the budgets of households in sub-Saharan Africa (AAMP, 2010).

2.6 The role of agricultural growth in food security

Agricultural growth offers possibilities for reducing the risk of food shortages at all levels of society, increasing the overall supply of food, creating economic opportunities for vulnerable people and improving the quality of food consumed by farm households (Benin *et al.*, 2008;

Fan and Rosegrant, 2008; Hendriks *et al.*, 2009b). Agricultural growth could benefit both rural and urban populations by providing more food and raw materials at lower prices (Hendriks *et al.*, 2009b). As argued by Bresciani and Valdes (2007) and Ravallion and Datt (1996), agricultural development has a stronger effect on the reduction of poverty and food insecurity than other sectors of the economy. Therefore, accelerated agricultural growth is imperative for poverty alleviation (Ahmed *et al.*, 2007; von Braun, 2008c), and is widely viewed as the means to address the global food crisis and simultaneously alleviate poverty, hunger and malnutrition, particularly in Africa (AU/NEPAD, 2009a). The potential for agricultural development has been identified by African governments through CAADP (AU/NEPAD, 2003) and leading international Development Partners (Department for International Development (DFID), 2005; Community of the European Commission, 2007; High Level Task Force on the Global Food Security Crisis, 2008; World Bank, 2008b).

However, increasing prices of farm inputs undermine poor farmers' ability to access the farm inputs for production (AU/NEPAD, 2009a). Von Braun (2008a) reported that where households produce their own food, cash and transport constraints limit people's ability to purchase farm inputs and market their produce. Food access by urban households hinges primarily on a household's ability to purchase food. At the same time, a shortage of capital prevents urban households from investing in transport, mechanical milling and other high return farm or non-farm business opportunities. Instead, the poor depend on low-return, unskilled labour activities such as basket making, weaving and casual labour (AU/NEPAD, 2009a).

In summary, agriculture is the mainstay of most African economies and millions of smallholders depend on farming for their livelihoods (Wellard and Hughes, 2011). Agricultural growth underpins food security and poverty alleviation efforts, and supports wider economic development. However, agricultural growth has generally been disappointing in Africa and there is concern over the state of hunger on the continent (Wellard and Hughes, 2011). In the face of high food prices and international market failures, agriculture faces new global challenges.

2.7 The global food crisis

During the high food crisis of 2008, international prices of all major food commodities reached their highest levels in nearly 30 years (Figure 2.1) (Cohen and Garrett, 2009; de

Janvry and Sadoulet, 2009; de La Torre Ugarte, 2008). Real prices were the highest in 2007/08 and food prices set new global records (IFPRI, 2008). The price of maize and wheat roughly doubled and rice prices tripled between August 2007 and July 2008 (FAO, 2008e; IFPRI, 2008). Between June 2007 and June 2008, the World Bank food grain price index increased from 180 to 334 per cent (Wodon and Zaman, 2009), while both the FAO and IMF indices for food grain increased by 56 per cent in the same period (ASARECA, 2008; Mitchell, 2008).

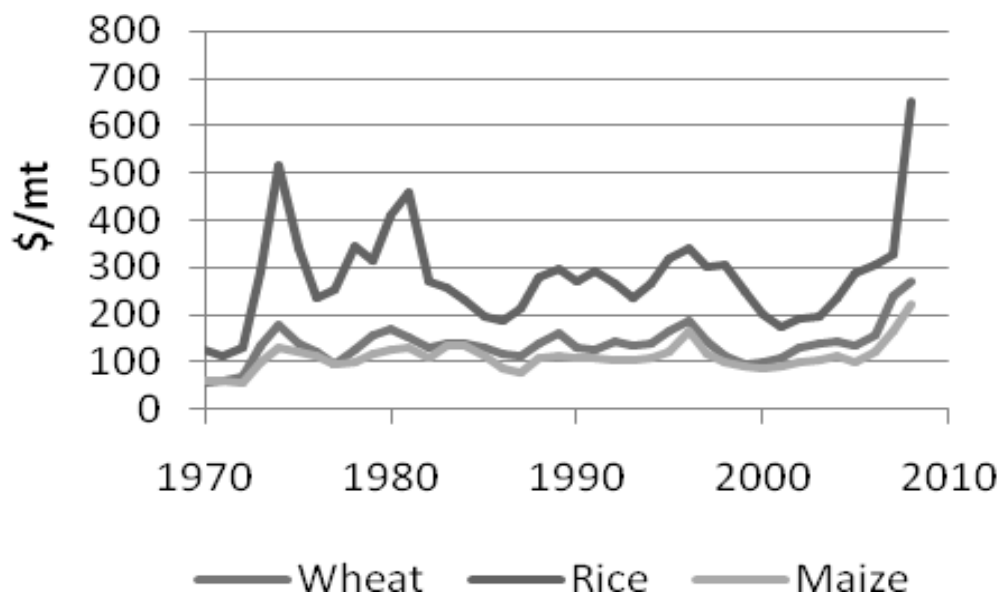


Figure 2.1: International prices of key food crops (adapted from TerrAfrica, 2009:1).

Although prices levelled out after July 2008, price volatility has remained high and food price trends indicate an upward structural adjustment (Headey *et al.*, 2009). Projections suggest that food prices are likely to remain high in the next few years (Figure 2.2) (FAO-IFAD-WFP, 2008; FEWS NET, 2011; Hendriks and Drimie, 2010; Timmer, 2011). Fan *et al.* (2011), Ortiz *et al.* (2011) and the World Bank (2011) point out that global food prices have continued to increase in 2011 and exceeded the peak levels of the 2007/08 food crisis. However, the 2010/11 food price increases were not consistent across all grains, as in the 2007/08 high food price crisis, but grain production and stock levels were higher compared with 2007/08 (Yu-si and Wen-an, 2009).

2.7.1 The 2007/08 high food price trends in Africa

The increase in food prices worsened the already significant situation of poverty and hunger in Africa (Mittal, 2009; Ngongi, 2008). Between January 2007 and March 2008, food price indices in several countries rose between 11-20 per cent.

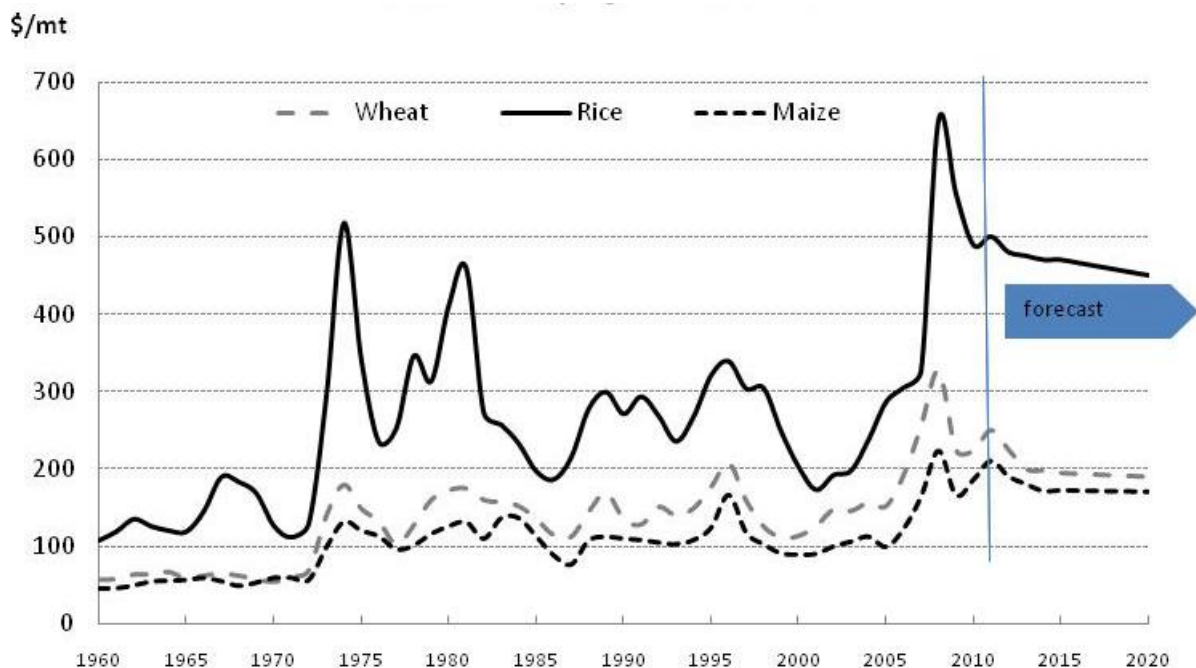


Figure 2.2: Annual food grain prices, 1960-2020 (Christiaensen, 2011; Timmer, 2011:3).

In East Africa, maize prices almost tripled in 2008 compared with the previous year, and in September of that year were higher than USD 600 per ton. Between January 2007 and March 2008, the Consumer Price Index (CPI) in Burundi, Ethiopia, Kenya, Malawi and Tanzania showed upward trends, with higher increases on the mid-2007 period (ASARECA, 2008). Ethiopia experienced the highest food price index increase (54%) in the East and Southern African region since march-April 2008, followed by Kenya (20%), Uganda (17%), Rwanda (16%), Zambia and Tanzania (13%) respectively.

The smallest increases in the food price index were observed in Malawi (11% rise in the food price index) and Zambia and Tanzania (13%) (Hendriks *et al.*, 2009a; Minde *et al.*, 2008). These countries are relatively large maize producers and were significant food exporters until export bans were introduced in 2008. The smaller increases may be explained by weak links between domestic and international markets in these countries and the fact that these governments control prices.

Namibia and South Africa registered price index increases of 17 and 16 per cent between March 2007 and April 2008 respectively (ASARECA, 2008). Lesotho is reliant on imported food and registered the highest price index increase for the region of approximately 20 per cent over the same period (Minde *et al.*, 2008). Tanzania's maize price change was exceptionally high, at 94 per cent over a year. The lowest price increases were seen for typically non-traded staple foods, such as banana in Uganda and teff in Ethiopia, over the same period (ASARECA, 2008). Table 2.2 reports the price changes of key staple foods in some African countries.

Table 2.2: Increases in food prices over March 2007 to March 2008 (ASARECA, 2008; FAO, 2008c)

Country	Per cent increase in prices (%)							Poverty rate (% of population living on less than US\$1.25 per day (1990 – 2005))
	Beans	Maize	Millet	Rice	Sorghum	Teff	Wheat	
Benin		225		45	79			30.9
Burkina Faso		36	28- 46	65	13			27.2
Burundi	40							81.3
Cote d'Ivoire		20		30				-
Eritrea							115.25	-
Ethiopia		147			133	20	74	39.0
Guinea				14				-
Kenya		30						45.9
Madagascar				11				67.8
Malawi		157.04						73.9
Mali			28- 46	43				51.4
Mozambique		85		60				38
Niger		52	28 - 46	50	17			65.9
Nigeria			116		92			64.4
Rwanda	36				32			56.9
Senegal		37	30	112				33.5
Somalia	317	378			352		287	-
South Africa		-3.93						10.7
Sudan					75		59.66	-
Tanzania		94						57.8
Uganda	56	12	5					51.5
Zambia		34						63.8

Domestic maize prices in Ethiopia, Kenya, Malawi and Mozambique increased at a faster rate than world maize prices, varying from 59 to 157 per cent. For example, between April 2007

and March 2008, average market prices of maize went up 32 per cent in Zambia, 65 per cent in Mozambique and over 100 per cent in Malawi and Tanzania. Maize prices in Zambia dropped significantly following the April/May harvest (ASARECA, 2008). This drop in food prices might have been as a result of a good maize harvest in the region (Kamara *et al.*, 2009).

In West Africa, cereal prices increased inconsistently across countries (Kamara *et al.*, 2009). The price of imported rice rose by 43 per cent in Mali, 50 per cent in Niger and 65 per cent in Burkina Faso between August 2007 and 2008. Senegal experienced the highest rice price increases compared with other West African countries (112% in the same period). Kamara *et al.* (2009) pointed out that rice prices in Senegal increased from CFAF 30,000 per 100 kg, to more than CFAF 45,000 per 100 kg between June and July 2008. Senegal imports 53 per cent of its domestic rice requirement, while in many other West African countries, cereal imports account for less than 10 per cent of domestic requirements (Kamara *et al.*, 2009). In Burkina Faso, on the other hand, imported rice fell from CFAF 45,000 in June 2008 to below CFAF 40,000 per 100 kg, but remained at CFAF 39,000 in July and August 2008 (Kamara *et al.*, 2009).

The price of millet (locally produced) increased by 28 to 46 per cent in Burkina Faso, Mali and Niger. In Senegal, the millet price rose 30 per cent above the five-year average by April 2008, while in landlocked Mali, the increases were lower and stabilised at above CFAF 35,000 (approximately 68.9 USD) per 100 kg (ECOWAS and CILLS, 2008). In January 2009, rice prices stabilised in Niger, Burkina Faso and Mali, but were still 50, 60 and 29 per cent higher respectively than a year earlier (Kamara *et al.*, 2009). FAO (2009b) attributed the increase in rice prices to the sharp depreciation of the West African currency (CFAF) against the dollar (from 0.24 USD/100 CFAF to 0.19 USD/100 CFAF) between July and November 2008, and to relatively high tariff levels (Kamara *et al.*, 2009). Maize prices in Nigeria and Niger rose higher than other countries in West Africa, driven mostly by poor harvests and increased demand for poultry feed (ECOWAS and CILSS, 2008).

2.7.2 The drivers of the 2007/08 global food price increases

A large body of research has attempted to identify the factors that might have caused the high food price increases (Headey and Fan, 2008). A combination of complex factors led to the price increases (FAO, 2011a; PAAP, 2011a; Wodon and Zaman, 2009) (Table 2.3). The confluence of factors that led to price rises in 2007 highlighted long-standing failures of public policies with regard to agriculture and food security (Committee on World Food

Security High Level Panel on Experts (CFS HLPE), 2011; De la Torre Ugarte and Murphy, 2008; Timmer, 2011). To the contrary, Polaski (2008) argues that the high food price increases were simply historical patterns. Table 2.3 summarises the drivers of the 2007/08 high food prices.

The causes of the 2008 food price crisis include many factors affecting global supply, demand and food trade (United Nations, 2010a; Omilola and Lambert, 2009; Pender, 2008). High food prices are a reflection of underlying trends in supply and demand for agricultural commodities (AU/NEPAD, 2009a). Lower production of maize and wheat in the European Union and United States and increased food consumption demand in emerging economies caused the increase in food prices (Meijerink *et al.*, 2009). The causes of high food prices also included low harvests in major producing countries, high input prices and a strong increase in demand for biofuels, which all occurred at the same time, causing a peak in prices (Meijerink *et al.*, 2009; Mitchell, 2008). Some countries, especially in Africa, were already plagued by droughts, natural disasters and political unrest when the high food price struck. Therefore, high food prices exacerbated the already existing problem of food shortages caused by other factors.

Table 2.3: Summary of possible drivers of the 2007/08 high food prices (Abbott *et al.*, 2008; Baltzer *et al.*, 2008; Helbling *et al.*, 2008; Ogg, 2010; Polaski, 2008; Schnepf, 2008; Thurow and Kilman, 2009; Mitchell, 2008; Trostle, 2008; United Nations, 2010a)

Supply drivers of 2007/08 high food prices	Demand drivers of 2007/08 high food prices
Under-investment in agriculture	Increased demand for food and fodder
Reduced production of maize and wheat in the European Union and United States	Consumer demand for global commodities
Reduction in grain stock levels or depleted grain stock in some countries	Production of alternative fuels – biofuels
Higher oil prices contributing to increased fuel and fertilizer prices	Over-confident speculations on stock markets
Introduction of export restrictions by some major food producing countries: Argentina, Bolivia, Egypt, India, Pakistan, etc.	Provision of agricultural subsidies in Europe and United States distorted the comparative advantage of other countries on world markets

Millions of the world's poorest people face the devastation from the high food prices because global and national food system is fatally flawed and policy makers cannot find the courage to fix it (Oxfam, 2012). Headey and Fan (2010) and Oxfam (2012) argued that high food prices results from the fact that cheap food has been taken for granted for nearly 30 years. From their peak in 1970s crisis, real food prices steadily declined in the 1980s and 1990s and eventually reached an all-time low in the early 2000s. As such, rich and poor governments alike therefore saw little need to invest in agricultural production, and reliance on food imports appeared to be relatively safe and efficient means of achieving national food security (Headey and Fan, 2010). However, as international prices of major food cereals surged upward from 2006 to 2008 these perceptions quickly collapsed (Headey and Fan, 2010; Oxfam, 2012).

2.7.3 Transmission of global food prices to domestic markets

Price transmission refers to the effect of prices in one market on the prices in another market (Keats *et al.*, 2010; Minot, 2011). Price transmission is generally measured in terms of the transmission elasticity and is defined as the percentage change in the price in one market given a one per cent change in price in another market (Chirwa, 2009; Minot, 2011). Chirwa (2009) and Keats *et al.* (2010) argue that high international food prices partly explain the behaviour of domestic prices. However, the extent to which high international food prices affect domestic prices depends on the integration of domestic and international markets and the level of domestic food self-sufficiency.

Evidence suggests that most maize markets in Eastern and Southern Africa are integrated with international markets (FAO, 2009c). For example, prices for white maize in several markets in Eastern and Southern Africa increased in line with the world price of yellow maize, following an upward trend from early January 2007 to July 2008 (Rapsomanikis, 2009). The synchronous patterns of local white maize in Eastern and Southern Africa and internationally traded yellow maize illustrated strong transmission of international prices to domestic markets (Bryngelsson *et al.*, 2010; Cohen and Garret, 2009; Headey *et al.*, 2009).

In most developing countries, clear and significant rises in domestic prices of maize, rice and wheat were observed when prices spiked (Keats *et al.*, 2010). However, Minot (2011) found that in the African countries, the proportion of change in domestic prices was less than the

proportional change in the corresponding international price. Both Keats et al. (2010) and Minot (2011) reported that maize prices increased considerably across Africa as it is mostly traded internationally. The transmission of global prices to domestic markets impacted on the poor and on African governments.

2.7.4 The impact of high food prices on the poor and African governments

High food prices caused unrest in many African countries (including Burkina Faso, Cameroon, Senegal, Mauritania, Cote d'Ivoire), threatening the stability of governments (Kamara *et al.*, 2009; World Bank, 2009). Although high food prices were concomitant with elections in many African countries but it exacerbated the problem. The 2008 food price crisis was a cause of major concern among governments and the humanitarian community because of its potential negative effects on the nutritional and health status of vulnerable households (Oxfam, 2008). These negative impacts may jeopardise progress of developing countries towards achievement of the Millennium Development Goals (FAO-IFAD-WFP, 2008; von Braun and Torero, 2009a).

The rise in food prices severely affected the food security of many people and countries (Dorward, 2012; Yu *et al.*, 2010). High food prices disproportionately affected the poor (who spend a high proportion of their income on food) as their purchasing power was eroded (Benson *et al.*, 2008). The high prices of essential commodities placed strain on national and household budgets (Cohen and Garret, 2009; Wodon and Zaman, 2008; von Braun, 2008c).

High food prices forced households to adopt eroding coping strategies (including pawning valuable assets and selling jewellery) (Cohen and Garret, 2009). High food prices impact negatively on productivity as malnourished people cannot learn, work and function properly and their health is affected, increasing the burden on society and the state to provide for vulnerable populations and households (Cohen and Garret, 2009; von Braun and Torero, 2009b). Most poor households were left to cope on their own with high food prices. As reported by Compton *et al.* (2010) and van der Kam (2001), people adopt a range of strategies (mechanisms) to cope with reduced access to food. Most households cut back on a range of expenditure items and are forced to adopt food consumption strategies, including eating cheaper foods that are often less nutritious (Compton *et al.*, 2010; D'Souza and Jolliffe, 2010).

2.7.5 How do people cope with long-term high food price crisis?

Devereux (2001) defines coping strategies as a response to diverse events or shocks, including high food prices. Coping strategies involve a conscious assessment of alternative plans of actions (Snel and Staring, 2001). This does not necessarily mean that the chosen strategy is always successful in achieving the intended objectives. In fact, the coping strategies often have unintended negative effects (Mjonono *et al.*, 2009). Ellis (2000) defined coping strategies as the methods used by people to survive when faced with unanticipated livelihood failure, like high food prices. The strategies pursued by people differ in several aspects, that is, within the household and between households (Maxwell *et al.*, 2003). Due to varying degrees of wealth among households, different coping behaviours are adopted by households at different stages of food insecurity.

Tulane (1992) reported four progressive stages that households experience when faced with food insecurity. The first stage is marked by the initial shortage of food, or inability to provide sufficient quantities of food to all members of the household. During the first stage, responses developed by the households are reversible and, in principle, do not damage future productive capacity (van der Kam, 2001). Many times, households prepare for a food quantity shortfall, as in the case of seasonal production, by storing quantities of grain or selling small livestock quickly, and using the money to purchase food (Frankerberger, 1992; Tulane, 1992; van der Kam, 2001). These stored quantities of grain are often referred to as insurance, and are not intended to be a part of main income or an integral part of income generation, but simply crisis insurance (Tulane, 1992; van der Kam, 2001).

Generally, the most common food security indicators of stage one include dietary changes; reduction of meal frequency; reduction of food consumption; gathering of wild foods; inter-household transfers and loans; looking for credit; increased petty commodity sales (firewood, charcoal) and the seeking of wage labour or selling of labour (Tulane, 1992; van der Kam, 2001). People's reactions depend mainly on their perceptions of the severity of the crisis and their economic and social positions (FAO, 1997; van der Kam, 2001).

During the second stage, responses developed by households are less reversible, because households are forced to use strategies that reduce productive assets and threaten future livelihoods (van der Kam, 2001). The second stage of food insecurity is typically marked by the sale of assets - especially non-productive assets (Corbett, 1998; Tulane, 1992). At this

point in a food security crisis, food consumption begins to supersede asset preservation. Jewellery, livestock and assets that serve as crisis insurance may be liquidated (Corbett, 1998).

Generally, the assets that are retained are those that generate income, such as land, farming equipment, bulls and cattle (Tulane, 1992). In addition to the sale of non-productive assets, the second stage also sees the onset of loans or credit from a merchant (as opposed to family) which have serious implications for the future security of the household members. Typical food security indicators of the second stage include sales of non-productive livestock and/or jewellery; insurance assets; temporary migration for work or land (days/weeks, days/month); skipping meals for the entire day (days/weeks) and withdrawing children from school (Tulane, 1992; van der Kam, 2001).

Stage three is characterised by the sale of productive assets and the shift of priorities from asset preservation to ensuring adequate food consumption (van der Kam, 2001; Saad, 1999; Rugalema, 2000). At this point, all other attempts have either failed to provide sufficient food, or the crisis has been prolonged, leading to a dire situation (Saad, 1999). Remaining livestock and personal items are likely to be sold at this stage, with possibly even the sale of housing material. The pledging or sale of land is also likely to occur (Saad, 1999; Tulane, 1992; van der Kam, 2001). This disposal of assets usually ensures survival, but jeopardises future food security (Tulane, 1992). Indicators of stage three include sale of most livestock and/or productive equipment; sale or mortgage of land; sending children to better-off relatives (rare) and migration (Tulane, 1992).

Stage four is the last stage and represents complete destitution. In this stage, households dissolve and permanent migration (either whole or part of household) occurs in order to resettle on suitable land, find wage labour or, more likely, and access food aid assistance (Saad, 1999; Tulane, 1992; van der Kam, 2001). Individuals are generally too weak to work and simply need food and care to survive at this extreme stage. Indicators of stage four include permanent migration, begging for food or resources and dependence on external aid (Tulane, 1992; van der Kam, 2001).

Evidence from several studies by Cohen and Garret (2009); Compton *et al.* (2010); D'Souza and Jolliffe (2010) and Kodithuwakku and Weerahewa (2011) suggests that high food prices have consistently forced households to adopt countless coping strategies to meet their food needs (Kodithuwakku and Weerahewa, 2011). The existing empirical studies indicate that

strategies include reduction in food consumption, switching to substitutes, adopting various measures to smooth food consumption and engaging in new economic activities. Kodithuwakku and Weerahewa (2011) stated that different strategies have different short-term and long-term effects on the sustainability of households. In designing and implementing appropriate policy responses to high food prices, governments should have a comprehensive understanding of the nature and diversity of strategic responses adopted by various vulnerable groups, the factors that determine the choice of various strategies and the relative effectiveness of varying strategies (Kodithuwakku and Weerahewa, 2011).

2.8 African governments' policy responses to the 2007/08 high food prices

African governments have responded to the high food prices in varied ways depending on the social, political, economic and biophysical realities (ASARECA, 2008; Compton *et al.*, 2010; FAO, 2008a; Meijerink *et al.*, 2009; PAAP, 2011b and Wiggins *et al.*, 2010). Table 2.4 summarises these, while Appendix A gives a fuller list of country responses.

Table 2.4: Examples of policy responses implemented by African governments in response to high food prices in 2007/08 (Hendriks *et al.*, 2009a)

Policy response	Number of countries	Short (S) or long-term (L) measure
Lowering of import tariffs	18	S
Production support	16	S and L
Reduce taxes on grain	16	S
Release stocks at subsidised prices	16	S
Price controls/subsidies	15	S
Cash transfers	10	S
Food stamps/vouchers/rations	9	S
Export restrictions	9	S
School feeding	5	S and L
Food-for-work	5	S
Increase supply via imports	3	S
Lowering of imported fertilisers and/or seeds	1	L

Careful consideration and analysis of responses shows that the interventions can be classified into three categories (FAO, 2008a; FAO, 2008b; FAO, 2011a; Chirwa, 2009; Meijerink *et al.*, 2009; Rapsomanikis, 2009; Wiggins *et al.*, 2010):

- **Trade-orientated policy responses** that protect domestic stocks, reduce tariffs and restrict exports to reduce prices for consumers and/or increase domestic supply
- **Consumer-orientated policy responses** that provide direct support to consumers and vulnerable groups in the form of food subsidies, social safety nets, tax reductions and price control, among others
- **Producer-orientated policy responses** that provide incentives for farmers to increase production, including measures such as input subsidies and producer price support.

Choosing a response measure or mix of responses is a weighty decision for any government, particularly in Africa where food insecurity was already fairly high before the onset of the global price crisis (FAO, 2011a; Hendriks *et al.*, 2009a). Any programme response requires increased public spending, often at the expense of financing other basic services and of investment in agricultural production to protect future food needs (Hendriks *et al.*, 2009a). For example, in responding to the immediate crisis, several countries depleted foreign exchange reserves or had to resort to domestic borrowing, risking higher inflationary pressures and balance of payments (FAO, 2011a; FAO, 2008a).

Considering Table 2.4 and Appendix A, it is clear that African governments used a mix of strategies to mitigate the effects of high food prices. Many measures were short-term responses and addressed the immediate crisis. This meant that the long-term development needs of the population were not considered. Without structured exit strategies, these programmes become a long-term drain on public expenditure (FAO, 2008a).

Trade-orientated policy measures were the most common responses of African governments to the food crisis in early 2008 (FAO, 2011a). These included: releasing stocks at subsidised prices; export restrictions and lowering import tariffs to protect the domestic markets from prices increases; and protecting the welfare of buyers (Hendriks *et al.*, 2009a). Lowering

import taxes on food commodities reduced government revenue at a time when emergency and social protection needs were higher and, in the long-run, reduced a country's ability to respond to another protracted crisis (PAAP, 2011b; FAO, 2008b and 2008c).

In some countries, the benefits of reducing import taxes were not always passed onto consumers (PAAP, 2011b). While such measures may buffer consumers, they go against regional trade agreements and create disincentives for farmers, who desperately needed to reap the long-awaited benefits of higher prices. Import taxes usually protect local business from unfair competition. Lowering import taxes may, therefore, harm domestic markets, except where domestic supply is unable to respond to local demand. However, lowering import tariffs on fertilisers and seeds directly reduces input prices and could induce a production response, leading to longer-term benefits (FAO, 2011a; FAO, 2008b). Reducing duties on food imports resulted in a 1.5 per cent loss of expected tax revenue earnings in Burkina Faso, and reducing import duty on fertiliser did not spare the country either as it resulted in an additional 0.6 per cent loss of revenue earnings (FAO, 2008a; Hendriks and Drimie, 2010).

ASARECA (2008); Consultative Group on International Agricultural Research (CGIAR) (2009); Economic Communities of West African States (ECOWAS) and Permanent Interstate Committee for Drought Control in the Sahel (CILSS) (2008) and Minde *et al.* (2008) indicated that export bans were introduced in panic by many countries to protect domestic markets and boost strategic reserves. This behaviour induced greater regional price volatility, affected foreign exchange earnings, led to regional instability and conflict and may counteract the impact of reductions in import taxes (FAO, 2011a). Export bans can negatively affect production because they may discourage farmers from producing food, as export bans could reduce their production incentives. Ethiopia, Kenya, Rwanda and Uganda released food grain reserve stocks to alleviate food shortages, but were still unable to fill the food consumption gap of the population. These countries turned to the international community to help rebuild reserves or provide additional emergency relief (Hendriks *et al.*, 2009a). Malawi was able to provide for its population through increased productivity and a good maize harvest as a result of strategic investment in agriculture prior to two to three seasons (FAO, 2008b and 2008d).

Consumer-orientated policy and programme measures were implemented by African governments from early 2008. These included price controls, price subsidies, reduction of taxes (VAT) on staple foods, cash transfers, handing out of targeted food stamps, vouchers and rations, school feeding programmes, and food-for-work programmes (Table 2.4 and Appendix A). As indicated by Hendriks and Drimie (2010), many of these measures were adopted as emergency responses aimed at protecting the purchasing power of consumers. Kenya removed VAT (16%) on rice and bread, while Ethiopia removed VAT (15%) on food grains and flour (FAO, 2008a). Governments need to be careful with such an intervention as reduction of VAT increases the purchasing power of the poor, who spend a large proportion of their income on food, but also reduces government revenue. Price control fixes the price of staple foods to protect consumers, but these measures act as a disincentive to farmers. Malawi regulated maize sales and prices through the Agricultural Development and Marketing Corporation (FAO, 2008a). However, price fixing at low levels is likely to discourage domestic production and create a thriving black market (FAO, 2011a).

Social safety nets and protection are necessary to provide for the poorest and most vulnerable people (FAO, 2011a). Food subsidies were projected to exceed one per cent of GDP in Burundi, Egypt and Morocco. Malawi, Mauritania and South Africa were expected to spend between 2.0 and 4.5 per cent of GDP on social transfers (including agricultural subsidies). Malawi devoted approximately 15 per cent of government expenditure (about 2.6 per cent of GDP) to supporting poor farmers alone (Hendriks *et al.*, 2009a). Social protection programmes reduce the impact of a crisis and mitigate against hunger and malnutrition among the most vulnerable sectors in both urban and rural areas (ASERECA, 2008; FAO, 2011a). Egypt, Ethiopia, Mozambique, Lesotho and South Africa (with the largest on-going cash transfer programme) used cash transfers to assist vulnerable households which face the crisis (ASARECA, 2008). In West Africa, food-for-work programmes were introduced in Sahel countries and Nigeria (ECOWAS and CILLS, 2008). School feeding is an important component of food assistance and income support, but were introduced in only a very few countries and where school feeding programmes already existed, these programmes were expanded (FAO, 2011a). A food ration/stamp system was introduced in Tanzania (FAO, 2008b and 2008c).

Production-orientated responses included production support, productive safety nets, and fertiliser and seed programmes (Chirwa, 2009; FAO, 2011a; FAO, 2008a; Meijerink *et al.*,

2009; Rapsomanikis, 2009; Wiggins *et al.*, 2010). Countries that introduced or expanded input subsidy programmes were Madagascar, Malawi, Tanzania and Zambia (Appendix A). In 2007, Kenya introduced a targeted input subsidy, fertiliser and seed, under the National Accelerated Agriculture Input Access Programme. Some countries opted to promote home gardens and the use of irrigated land (ASARECA, 2008). Malawi's fertiliser subsidy programme has driven the increased production that buffered it from the 2008 food crisis (FAO, 2008a). In 2006/07, the subsidy programme included the sale of 175 000 tonnes of fertiliser, and 4 500 tonnes of seeds of hybrid maize and open pollinated varieties to targeted farmers with a 72 per cent subsidy, that is, farmers paid only 28 per cent of the price, (FAO, 2008a; 2008b). The Malawi subsidy programme cost US\$91 million in 2006/2007. As a result, maize production increased by 26 per cent in this season. The government continued distributing coupons in 2007 and 2008 to poor smallholder farmers to buy fertiliser and seeds at close to 80 and 100 per cent subsidy respectively (ASARECA, 2008; FAO, 2008a).

Many government responses were not appropriate as they compromised long-term development objectives (FAO, 2011a; Hendriks *et al.*, 2009a). For example, closing borders to trade can negatively affect regional relationships with spill-over effects on neighbours (ASARECA, 2008; Hendriks and Drimie, 2010; Polaski, 2008). This means that neighbouring countries that relied on trading with the country that closed their borders were no longer able to purchase those commodities. FAO (2011a) mentioned that some producers in East Africa expressed concerns that high food price responses mainly favoured the consumers, compared with maintaining a balanced approach. This meant that producers wanted the responses to favour both producers and consumers. However, some policy responses from some of the African governments matched those suggested by Benson *et al.* (2008a). Table 2.5 shows some of the suggested policy options to address high food prices and mitigate hunger in Africa.

Table 2.5: Recommended interventions to address high food prices (Benson *et al.*, 2008a:13)

Type of intervention	Timeframe		
	Short Term < 1 year	Medium Term 1-3 Years	Long Term > 3 Years
Reduce food prices for consumers (price-oriented policies)	<ul style="list-style-type: none"> • Reduce tariffs/taxes on food • Adopt food price controls/take action against profiteers • Adopt consumer subsidies • Adopt food export bans or taxes • Pursue government food imports • Release food reserve Stocks 	<p><i>Same options as short term plus:</i></p> <ul style="list-style-type: none"> • Establish food Reserves and release policy • Establish variable tariffs or variable export taxes/ subsidies • Pursue options to increase domestic food production (see below) 	<p><i>Same options as medium term plus:</i></p> <ul style="list-style-type: none"> • Invest in marketing infrastructure, institutions, and information • Invest in increased food production capacity (see below)
Increase food production (supply-oriented policies)		<ul style="list-style-type: none"> • Adopt input subsidies where appropriate • Adopt producer price supports and subsidies • Expand agricultural credit • Strengthen agricultural extension 	<p><i>Same options as medium term plus:</i></p> <ul style="list-style-type: none"> • Pursue agricultural R&D • Invest in productive infrastructure and assets (e.g., irrigation, mechanization) • Improve natural resource management • Improve property rights and resource tenure systems
Increase food availability for or income of target groups (income-oriented policies)	<ul style="list-style-type: none"> • Increase support through existing social protection programs • Increase public sector wages • Increase food aid programs 	<p><i>Same options as short term plus</i></p> <ul style="list-style-type: none"> • Establish new social protection programs or expand/improve existing ones 	<p><i>Same options as medium term and those for increasing food production plus</i></p> <ul style="list-style-type: none"> • Invest in other development and antipoverty programs (e.g. education, promote rural non-farm enterprises)

2.9 Summary of the literature review

The term ‘‘food security’’ is used to describe a situation where all people, at all times, have the physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences. Being food-secure, for a nation or family, is to have a reliable source of food and sufficient resources to purchase it.

High food prices threatened Africa's progress towards achieving the first MDG and created a considerable panic among the developed and developing countries alike, posing serious problems for three groups. These groups included the poor, whose ability to purchase food was compromised; governments, who had to face higher import bills, higher safety net programmes and political unrest; and aid agencies, who had to juggle with increased demands for food, cash and technical advice.

During the 2007/08 high food crisis, some governments acted in panic, putting in place measures such as export bans, which exacerbated the crisis and negatively affected food security (FAO, 2011a). The policy responses and measures adopted by countries to address the 2007/08 crisis consisted of trade-oriented measures, consumer-oriented and producer-oriented measures. On a positive note, the high food prices presented an opportunity for African governments to revitalise and develop African agriculture from the short, medium and long-term perspectives. It is important to build consistency between the responses to the crisis and introduce policy measures and actions for medium to long-term development.

Recognising the food crisis, in May 2008 the AU/NEPAD called a workshop to accelerate international investments in response to high food prices and food insecurity, where country representatives developed their country short-term response action plans, following guidance from the CAADP FAFS. This study comparatively analyses if the investment plans of the five selected countries mitigate high food prices through improved household risk management strategies. The next chapter introduces NEPAD, CAADP and FAFS.

CHAPTER 3: INTRODUCTION TO NEPAD, CAADP AND FAFS

3.1 The New Partnership for Africa's Development (NEPAD)

The New Partnership for Africa's Development (NEPAD) is an initiative by African leaders in recognition of their pressing duty to eradicate poverty and place their countries (both individually and collectively) on a path of sustainable growth and development (Hendriks *et al.*, 2009b). NEPAD provides unique opportunities for African countries to take control of their development agendas and cooperate more effectively with international development partners (AU/NEPAD, 2009b and 2009c). The overall NEPAD objectives are to (AU/NEPAD, 2008a; 2010):

- Establish conditions for sustainable development (peace and security; democracy and good political, economic and corporate governance; regional cooperation integration and capacity-building)
- Encourage policy reforms and increased investments in priority sectors (agriculture, human development, infrastructure, environment, etc)
- Mobilise resources (increasing domestic savings and investments; management of public revenue and expenditure; Africa's share of global trade; foreign direct investment).

Agriculture plays a dominant role in most African countries and is a key for stimulating growth, reducing food insecurity and poverty and being a vehicle for meeting the MDGs (Zimmermann *et al.*, 2009). As reported by von Braun and Mkandawire (2010), more than two-thirds of Africa's poor work in agriculture, but agricultural productivity in Africa remains the lowest in the world. Increased production and productivity will not only reduce food prices, but provide a central thrust around which the battle against African food insecurity and poverty must be waged (von Braun and Mkandawire, 2010).

3.2 The Comprehensive Africa Agriculture Development Programme

Even though Africa has been exposed to a number of development agendas, the majority of Africans are still poor and the proportion of hungry people has not changed much since 1960s (Mkandawire *et al.*, 2009). As stated by Mkandawire *et al.* (2009:2): “the results of years of neglected national government and international investments in African agriculture are surfacing and the wisdom of international development paradigms and practice is being questioned on a continent where the majority of livelihoods are agriculturally based, particularly among the most vulnerable people – Africa’s women who constitute approximately 70 per cent of smallholders”.

Recognising the underperformance of agriculture in the continent, Africa’s leaders adopted the CAADP and agreed to raise budget allocations for agriculture to a minimum of 10 per cent of public spending (Hendriks *et al.*, 2009a). CAADP was then endorsed as a vision for the restoration of agricultural growth, food security and rural development in Africa (AU/NEPAD, 2008a). Therefore, CAADP is an Africa-owned and Africa-led framework, developed and passed in Maputo (AU/NEPAD, 2009b).

The origin of CAADP dates back to 2001, when the FAO organised a brainstorming session on the role of agriculture in the implementation of NEPAD (Table 3.1) (FAO, 2004). In 2003, under the auspices of CAADP, African governments, regional bodies, donors, agriculturalists and other stakeholders established four continent-wide priorities (referred to as CAADP pillars) for investments and action in agriculture, forestry, fisheries and livestock management (AU/NEPAD, 2005). In nearly a decade, CAADP has emerged as a major milestone in the renaissance of African agriculture, and its framework and process is informing policy changes and new agricultural development agendas (Mkandawire *et al.*, 2009). There is a noticeable consensus that CAADP represents a major paradigm shift in the development practice for Africa (Mkandawire *et al.*, 2009; Zimmermann *et al.*, 2009).

Table 3.1: Consultative process for the preparation and evolution of CAADP (FAO, 2004; Zimmermann *et al.*, 2009)

December 2001	Brainstorming Workshop on Agriculture and Water (FAO, Rome): FAO organised a workshop for the 15 member countries of the NEPAD implementation committee, which focused on the required investments on land and water improvements.
January 2002	Work in progress workshop (Benoni, South Africa): FAO made a case for giving prominence to agriculture in terms of both production and trade – in the NEPAD process at the meeting organised by NEPAD Steering Committee (NEPAD-SC).
February 2002	Twenty-second FAO Regional Conference (Cairo, Egypt): The agenda of the twenty-second FAO Regional Conference for Africa (4 – 8 February 2002) included a major item on NEPAD, for discussion at both ministerial and expert levels. The discussion led to increased awareness of NEPAD and a resolution that adopted it, recommended actions for governments and encouraged FAO to continue extending support to the process.
Second Quarter 2002	CAADP preparation through a consultative process: At the invitation of the NEPAD-SC, FAO worked with the African experts on a draft CAADP document which was finalised after consultations with relevant stakeholders and, amongst whom were, ministries, RECs, Regional Development Banks (RDB) and farmers' organizations. On the 17 th of May 2002, a first draft was presented to the NEPAD-SC in Maputo to secure guidance before finalising the version presented at the African Ministers for Agriculture in Rome, June 2002. CAADP endorsement: The CAADP was endorsed by African Ministers for Agriculture on 9 June 2002 in Rome at a follow-up Ministerial Meeting on NEPAD (additional session of the Twenty-second FAO Regional Conference for Africa)
December 2002	A special set of meetings was organised 5 – 12 December 2002 in Abuja by the Government of Nigeria, African Development Bank (AfDB), Economic Community of West African States (ECOWAS), the NEPAD Secretariat and FAO for Regional Economic Communities. The meetings, which consisted of segments at expert, ministerial, Heads of State and Government (HSG) levels, led to the adoption of an Abuja Declaration that included commitments and decisions on action, as well as creating an enabling environment for agriculture. The Declaration also committed to the preparation of a comprehensive and detailed Action Plan that would convert the broad thrusts of the CAADP document into more bankable projects reflecting the priorities of the Regional Economic Organisations (REOs)/RECs (and their national memberships) as well as NEPAD Flagship Programmes to be proposed by the REOs/RECs.
Late March- Early April 2003	The NEPAD Secretariat organised (in Johannesburg, South Africa) an inter-agency workshop to prepare the Action Plan recommended in Abuja.
July 2003	Mozambique – AU-NEPAD-FAO experts (1 July 2003) and ministerial (2 July 2003) meetings on the NEPAD agriculture programme. The meetings considered three documents: the state of food and agriculture in Africa 2003; responding to agricultural and food insecurity challenges—mobilising Africa to implement NEPAD programmes; and the process of converting the CAADP to implementable plans of actions at the national and regional levels. The recommendations of the ministerial meeting were passed to the African Union Assembly (AUA) of Heads of State and Government, which adopted them and concretised their commitment in the form of Declaration on Agriculture and Food Security in Africa (known as Maputo Declaration).

A specific goal of CAADP is to attain an average annual growth rate of six per cent in agriculture. To achieve this goal, CAADP aims to stimulate agriculture-led development that

eliminates hunger, reduces poverty and food insecurity. More specifically, the AU/NEPAD vision for Africa holds that, by 2015, Africa should:

- Attain food security
- Improve agricultural productivity to attain a six percent annual growth rate
- Develop dynamic regional and sub-regional agricultural markets
- Integrate farmers into a market economy
- Achieve a more equitable distribution of wealth (AU/NEPAD, 2009b and 2009c).

The CAADP framework helps harness political will at all levels to implement the policy and the institutional changes needed for agricultural development (AU/NEPAD, 2010). It is believed that CAADP represents a new way of achieving agricultural impact in Africa by enabling increased and better aligned investment in agricultural research, development and capacity strengthening for its stakeholders (AU/NEPAD, 2010; Hendriks *et al.*, 2009b). CAADP offers improved decision-making and resource allocation based on coherent evidence-based planning, utilising relevant and timely information and analysis. Additionally, Hendriks *et al.* (2009b) reported that CAADP's emphasis on multi-stakeholder dialogue and decision-making is central to its success. The national and regional ownership in agricultural development is achieved through structured stakeholder involvement around priority setting, matching resources to priority tasks, and collaborating at the implementation stage of the prioritised programmes (Hendriks *et al.*, 2009b).

Moreover, CAADP provides a framework for strengthening and broadening inclusive planning to address poverty, hunger and food security in Africa, through the development and implementation of comprehensive investment programmes that focus on harnessing agricultural growth (AU/NEPAD, 2009b). CAADP recognises that agricultural growth alone cannot address hunger and poverty, but that comprehensive and well designed programmes are required to ensure that the poor participate in, and benefit from, agricultural growth. CAADP calls for engagement of all stakeholders in government (across sectors), civil society, farmers' organisations, NGOs and international development partners in the design of African owned and driven development (AU/NEPAD, 2009b). Given the diversity of African countries in the different levels of development, and facing various agricultural sector challenges, CAADP cannot be a prescriptive approach that pretends to offer universal solutions (AU/NEPAD, 2009b). Nor is it a set of super-national programmes to be implemented by individual

countries, but a programmatic guide for countries to design their country investment plans (AU/NEPAD, 2009b and 2009c).

Drawing from its vision, CAADP's specific objective is to support country-driven agricultural development strategies and programmes through (AU/NEPAD, 2010):

- Establishing clear commitment to deliver on specific targets, including investing 10 per cent of national budgets in the agricultural sector and achieving a six per cent growth in agricultural domestic product
- Promoting analyses of growth options and strategies by key stakeholders, leading to consensus around a national plan of action for agricultural development
- Enhancing systemic planning and implementation capacities, taking advantage of best practices and analyses of past successes and failures
- Ensuring mutual responsibility and accountability for programme results through joint analysis and ownership of problems and peer review of progress and outcomes
- Strengthening implementation mechanisms, including institutional arrangements and policy alignment
- Aligning government and development partners to agreed national agendas through African-led partnerships and development partner involvement with resource mobilisation as part of the process
- Exploiting regional synergies through access to AU/NEPAD, RECs and pillar institutions for advocacy, technical backstopping, capturing regional and continental overlap, and opportunities for building critical mass
- Putting a premium on knowledge and skills development, and making lessons learnt available to neighbouring countries and the continent as a whole.

CAADP is a strategic framework to guide holistic country development efforts and partnerships in the agricultural sector in Africa (AU/NEPAD, 2009a). It embodies (similar to the broader NEPAD agenda) the principles of peer review and dialogue to stimulate and broaden the adoption of best practices, facilitate benchmarking of policies and mutual learning and, ultimately, raise the quality and consistency of country policies and strategies in the agriculture sector (AU/NEPAD, 2009a).

CAADP directs investment to four mutually reinforcing and interlinked pillars, each with a framework that guides policy alignment and suggests actions for countries to consider in designing their CAADP compacts, policy alignment, programme design, investments and monitoring and evaluation post-compact (AU/NEPAD, 2005; 2009a and 2010). Each Pillar Framework assists countries in achieving the overall CAADP goals in a holistic and integrated manner, helping countries prepare sound investment plans.

These CAADP pillars are (AU/NEPAD, 2005; 2009a and 2010):

- Pillar I's Framework for Sustainable Land and Water Management seeks to extend the area under sustainable land management and reliable water control systems
- Pillar II's Framework for Improving Market Access (FIMA) seeks to improve rural infrastructure and trade-related capacities for market access
- Pillar III's Framework for African Food Security (FAFS) seeks to improve risk management, increase food supply, improve incomes for the poor and reduce hunger and malnutrition
- Pillar IV's Framework for African Agricultural Productivity (FAAP) seeks to improve agricultural research, technology dissemination and adoption through strengthened agricultural knowledge systems to deliver profitable and sustainable technologies that are widely adopted by farmers, resulting in sustained agricultural growth.

The CAADP four pillars adhere to CAADP's seven principles and targets that include (AU/NEPAD, 2009a):

- Agriculture-led growth as a main strategy to achieve the Millennium Development Goal of halving the proportion of people living on less than a dollar a day (MDG1)
- Pursuing a six per cent average annual sector growth rate at national level
- Allocating ten per cent of national budgets to the agriculture sector
- Exploiting regional complementarities and co-operation to boost growth
- Adopting the principles of policy efficiency, dialogue, review and accountability, which are shared by NEPAD programmes
- Strengthening and expanding partnerships and alliances to include farmers, agribusiness and civil society communities

- Assigning programme implementation to individual countries, coordination to designated Regional Economic Communities (RECs) and facilitation to the NEPAD Secretariat.

3.2.1 The CAADP country implementation process

The backbone of CAADP is the country implementation process – an interactive learning process comprising analysis, design, implementation and evaluation of agricultural programmes (AU/NEPAD, 2010). The country implementation process seeks to improve the quality and effectiveness of agricultural sector programmes through integrating the principles and values of CAADP into the national systems of development planning and implementation (AU/NEPAD, 2010). As stated by AU/NEPAD (2008a; 2009b and 2010), CAADP neither replaces nor runs parallel to national planning and development systems, but complements existing systems. Investment programmes are designed, implemented, reviewed, adapted and re-planned in an ongoing fashion, incrementally improving performance (Hendriks *et al.*, 2009b). While CAADP is not an external, expert-driven agricultural programme, external knowledge, ideas and facilitative guidance are important and welcome for CAADP's implementation success (Hendriks *et al.*, 2009b).

There are a number of steps in the CAADP process, presenting an interactive process of setting priorities and refining them. The steps in the process are illustrated in Figure 3.1 and in more detail in Figure 3.2. The two key documents in the CAADP process are the drafting and negotiating of a compact and a Country Investment Plan (CIP). The compact sets out the key priority areas that the country intends elaborating on in the CIP. This is finalised through a CAADP Country Roundtable (AU/NEPAD, 2010).

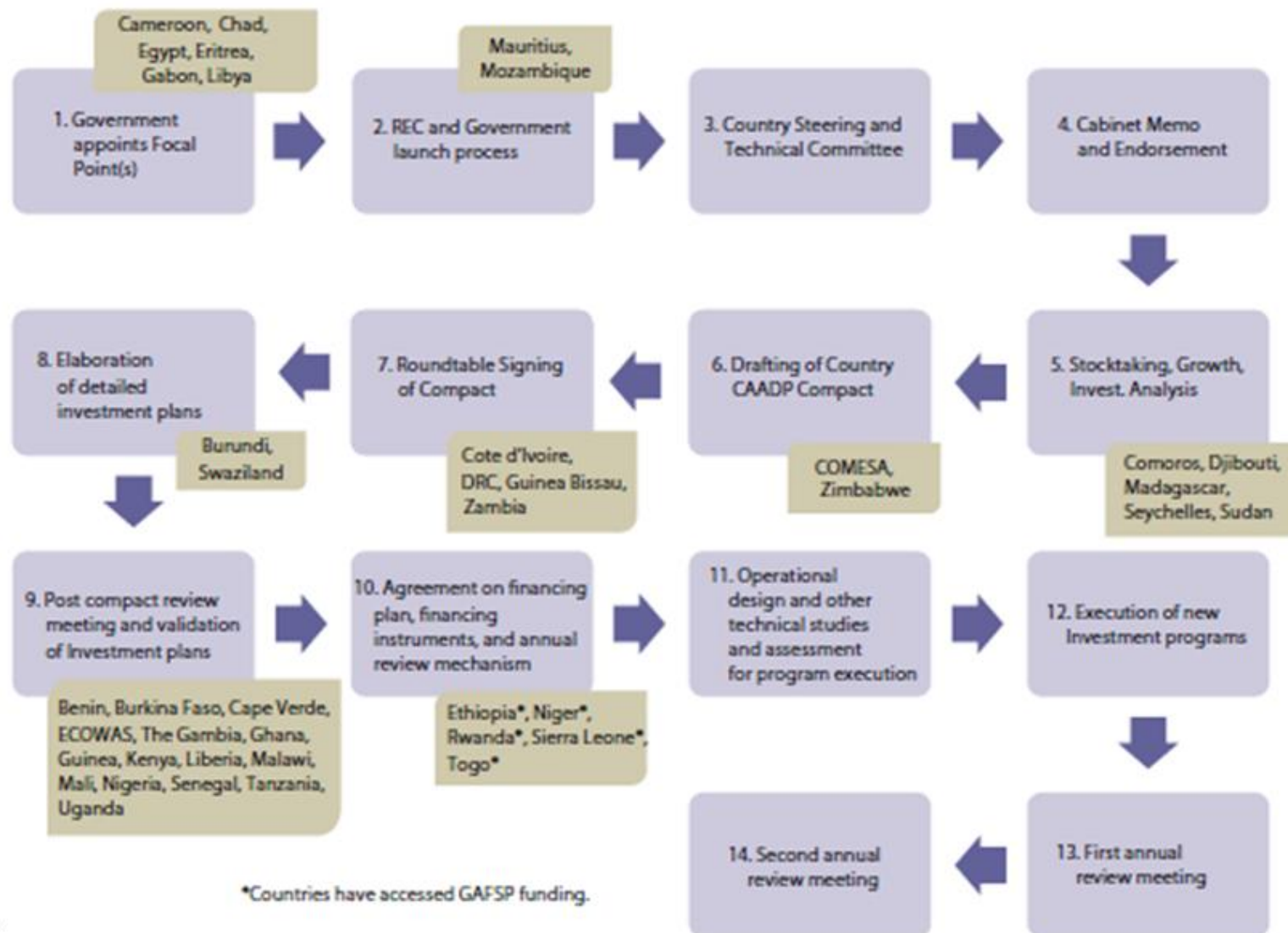


Figure 3.1: Summary of the CAADP process (ReSAKSS, 2010).

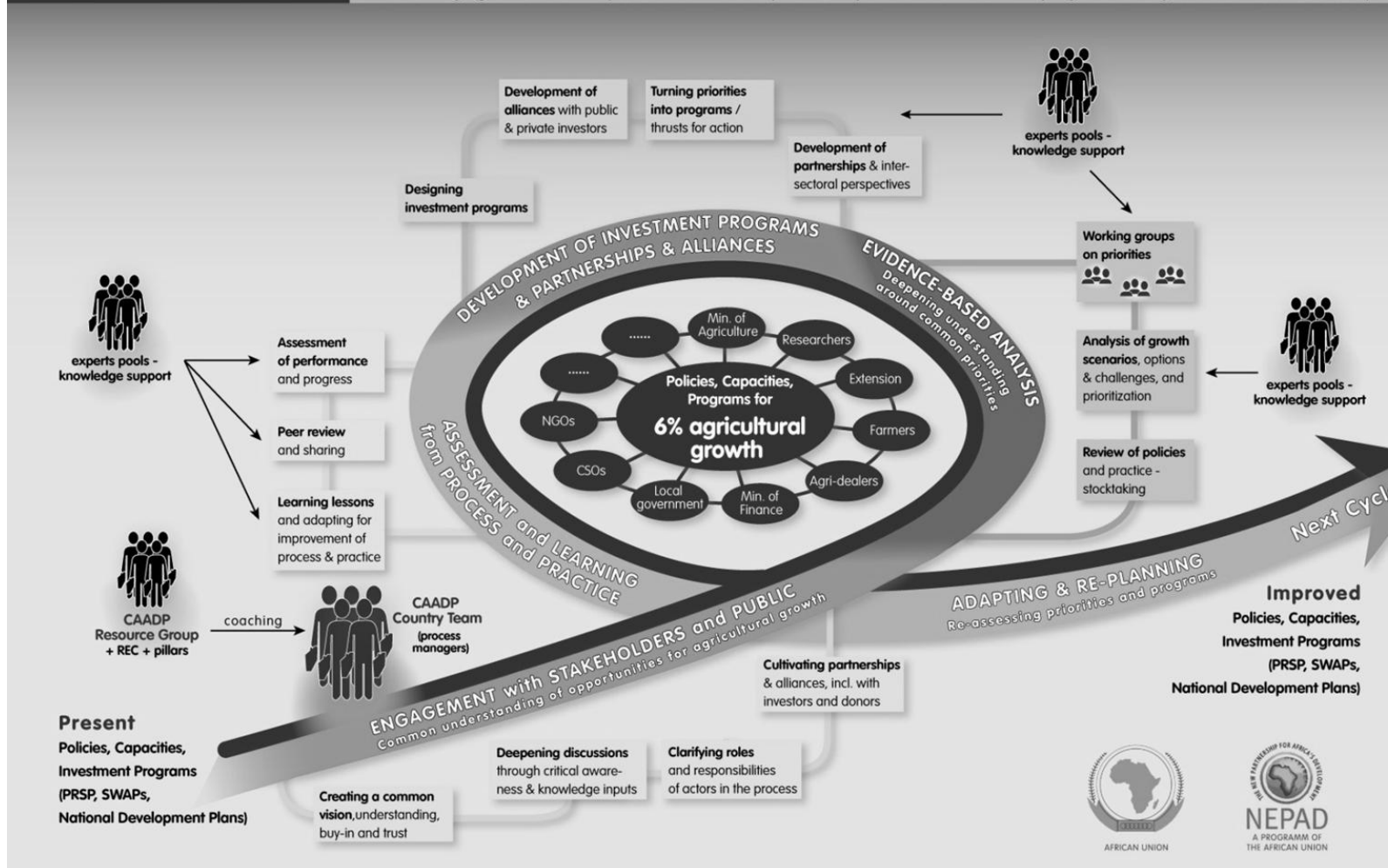


Figure 3.2: The CAADP country process cycle (AU/NEPAD, 2009c).

The purpose of the CAADP roundtable, which is hosted by the Government, NEPAD, and the relevant REC, is to reach consensus among key stakeholders on how to take forward national programmes for agricultural investments according to CAADP Principles (AU/NEPAD, 2009a). The main objectives of the CAADP roundtables are to (AU/NEPAD, 2009a):

- Review how national policies and investments are supporting agricultural development
- Identify constraints to achieving the six percent target growth rate for the agricultural sector, and identify policy and investment gaps
- Design action plans to bridge these gaps and agree on the necessary resources and capacity to implement the plans
- Adopt mechanisms to coordinate efforts and monitor and evaluate a country's progress and performance, post-compact and implementation of the plans of action.

The period following the compact signing includes a number of processes associated with:

- Stocktaking of the national status quo
- Analytical work to identify growth targets and test the best options for simultaneously achieving the necessary growth and reduction of poverty and hunger
- Policy review
- Institutional review
- Extensive consultation at various levels and with a wide range of stakeholders.

Finally, a CIP is drafted. The CIP presents the portfolio of comprehensive national priority programmes that aim to achieve economic growth through agricultural development and the simultaneous reduction of poverty and hunger (AU/NEPAD, 2010). These CIPs represent medium-term (4 – 5 years) investment commitments. They include a 'Road Map' for implementation, the necessary institutional framework for implementation and monitoring of progress, and a budget (AU/NEPAD, 2010). The budget indicates government's commitment to each programme and the nature of the funding gap. The CIPs are reviewed by an international review team coordinated by the NEPAD Secretariat. The CIP, the findings of the review and the funding gap are presented at a 'Business Meeting' that brings together the national government and stakeholders, together with CAADP stakeholders in the relevant region, continent and the international development community (AU/NEPAD, 2010).

The CAADP implementation is not a single linear dimension process, but is a multiple dimension process that guides the implementation of the investment programmes (AU/NEPAD, 2010). Its values and key outcomes are beyond the design of quality investment programmes, but are reflected in changes in the ways investment programmes are designed and implemented (AU/NEPAD, 2010). These changes in the investment programme design are triggered and sustained through (AU/NEPAD, 2010):

- Ongoing organisational development
- Deepening partnerships based on a shared vision and collective responsibility and mutual understanding/value
- Evidence and knowledge based support systems, including evaluation and strengthening of human capacity
- On-going systemic responsiveness and policy reforms through comprehensive and better informed policy dialogue and review structures.

Four principal, interlinked components have been identified as central to the CAADP implementation process. These components need to be tailored by each country to fit the context of local needs and aspirations, and translated into an appropriate action plan with realistic implementation time (AU/NEPAD, 2010). The components of CAADP implementation process include (AU/NEPAD, 2010):

- Engagement with stakeholders and public-common understanding of opportunities for agricultural growth. This component focuses on the critical entry points for stimulating and facilitating informed buy-in, and awareness and agreement on CAADP's value addition to country development and agriculture programme, including Poverty Reduction Strategy Programmes (PRSPs) and national agriculture development strategies.
- Evidence-based analysis- deepening understanding around common priorities. This component involves stocktaking and analysis – assessing and understanding the situation in a comprehensive and integral form, based on data and priorities among stakeholder groups
- Development of investment programmes, partnerships and alliances. This component involves cultivating and negotiating partnerships to attract and leverage investments into the agriculture sector. This is not only about attracting funds, but also

relationships and commitments aimed at defining and strengthening capacities and systems, including policy frameworks for quality investments, best return on investments and accountability.

- Assessment and learning from process and practice- adapting and re-planning. This component includes designing strategy and investment programmes around the identified priority/growth areas; determining the best possible implementation arrangements and mechanisms; and identifying modalities for follow-up monitoring and evaluation to assess performance while supporting learning, adaptation and peer review.

3.3 The CAADP Pillar III

CAADP Pillar III, as an objective, is a deliberate attempt to ensure that the agricultural growth agenda targets the chronically poor and vulnerable directly, rather than through indirect and hoped-for trickle down effects typical of past development policies and programmes (AU/NEPAD, 2009a). It focuses on the chronically food-insecure, and on populations who are vulnerable to, and affected by, various crises and emergencies (AU/NEPAD, 2009a). This is to ensure that the CAADP agenda simultaneously achieves the agricultural growth agenda and hunger and Millennium Development Goal targets for addressing poverty and hunger (MDG one aims to cut extreme poverty and hunger by half by 2015). FAFS subscribes to the CAADP principles and promotes the specific pillar principles (Table 3.2) (AU/NEPAD, 2009a).

3.4 The Framework for African Food Security (FAFS)

The CAADP's FAFS is a companion document to the CAADP Framework and sets out the only continental plan of action to address food insecurity (Tumusiime, 2009). It was prepared by CAADP Pillar III Expert Reference Group. After development, the FAFS was first consulted widely at regional, continental and international levels, then validated and endorsed by the African Union Commission (AUC) and presented for the first time at the AU/NEPAD high food price workshop in May 2008 (AU/NEPAD, 2009d). Similarly, the FAFS guide (Appendix B) and template (Appendix C) were used for the first time at the May 2008 high food price workshop and developed specifically as the need arose for the workshop.

As one of the four pillar frameworks, FAFS contributes directly to the goals of CAADP and is unique in a number of ways (AU/NEPAD, 2009a). FAFS does not only present the first and only continentally agreed on plan of action for addressing food insecurity but, while keeping with NEPAD and CAADP principles, the framework was drafted by a team of predominantly African experts who wanted to bring solutions for hunger and poverty in Africa (Tumusiime, 2009:2). It builds on existing efforts to address MDG one, poverty reduction efforts in-country, and agricultural growth targets, without creating an additional burden. As stated by Tumusiime (2009:2), FAFS is not “another project or programme but a tool for initiating in-country and inter-country dialogue in search of sustainable solutions to Africa’s food insecurity and hunger”. The framework came at an opportune time, when the world was faced with high food prices that worsened conditions for the food-insecure.

Table 3.2: The CAADP Pillar III Principles (AU/NEPAD, 2009a:4)

Principle 1:	“Protect the right to food for all citizens of Africa.
Principle 2:	Focus on the chronically hungry and malnourished, particularly women and children, in order to address short-term crisis and integrate them into broad agricultural development.
Principle 3:	Ensure that all parties and players automatically seek to understand and address hunger and malnutrition.
Principle 4:	Mainstream considerations of human diseases such as HIV/AIDS, malaria and TB.
Principle 5:	Ensure that emergency responses promote growth and reduce chronic hunger (i.e. do not harm to the overall CAADP agenda).
Principle 6:	Protect and promote the resilience of the livelihoods of the vulnerable.
Principle 7:	Ensure that gender dimensions of hunger and malnutrition are addressed.
Principle 8:	Promote intra-regional trade, particularly in food staples to raise food supply, food quality and moderate price volatility.
Principle 9:	Integrate regular review and broad-based dialogue to ensure successful implementation of this pillar.
Principle 10:	Be in coherent with MDGs, especially MDG1 to cut extreme poverty and hunger.
Principle 11:	Integrate lessons from success stories in cutting hunger and malnutrition”.

Clearly, the answer to stabilising and reducing local food prices is through increased production, which is also the most efficient means of stimulating economic growth in

developing countries and has wide-spread benefits for all segments of society (Hendriks *et al.*, 2009a). Increasing food production provides many opportunities for farmers and the non-farm sector and revenue for essential services through economic growth (Hendriks *et al.*, 2009a). However, stimulating agriculture-led economic development and maximising the benefits of high food prices hinges on national governments implementing pro-poor policies (production and market) and programmes (von Braun, 2008a).

Progress made through implementing CAADP's Pillar III contributes directly to the overall CAADP objective of achieving a growth rate sufficient to reach the MDG goals of reducing poverty and hunger by half by 2015. Progress will be measured through:

- Improvement in food security and nutrition indicators
- Improvement in the household assets and/or income levels of targeted vulnerable populations (AU/NEPAD, 2009a).

The FAFS aims to provide principles, recommended actions, coordination, peer review and tools to guide national and regional policies, strategies and advocacy efforts that lead to increased food supply, reduced hunger and malnutrition, and improved food security risk management (Hendriks *et al.*, 2009b). The FAFS provides guidance for governments in Africa to evaluate whether policy changes and programmes will have the desired impact on reducing hunger and malnutrition. Hendriks *et al.* (2009b) and Hendriks and Drimie (2010) have stated that FAFS brings structure and congruence to this effort to articulate an actionable food security agenda for Africa.

FAFS identifies four key objectives or elements that contribute to the goal of increasing resilience in vulnerable populations, namely (Table 3.3): improved risk management and household resilience; increased supply of affordable food through increased production and improved market linkages; increased economic opportunities for the vulnerable; and increased dietary diversity through diversification of food among the target groups to address malnutrition.

Table 3.3: FAFS objectives (adapted from AU/NEPAD, 2009a:46)

FAFS objectives	FAFS objectives explained
Improved risk management	At the household, community, national and regional levels to inform decisions which will ultimately impact the building and protection of assets and investments and strengthen national, regional, and community responses to climatic and economic shocks that risk and undermine the coping mechanisms of vulnerable populations. Strategic policy towards agricultural growth will influence the design of programme in sectors beyond agriculture, ensuring that all policies protect and further the agricultural growth agenda and its broad-based benefits.
Increasing the supply of food through increased production and improved market linkages	Increasing the supply of food through increased production and improved market linkages will increase the food available to households and communities. Strategies to increase the production of staple commodities are also more likely to impact poor small farm holders, increasing their incomes and extending the geographic reach of markets to underserved areas. Increased and improved agricultural productivity is necessary to achieve CAADP's poverty reduction and food output targets, at the same time reducing production costs and food prices for the poor.
Increasing economic opportunities for the vulnerable	Identifying potential opportunities for the diversification of livelihoods – particularly in support of adding value to agricultural production (through local processing, handling, transport, etc.) will both build resiliency and contribute to rural growth. Close coordination with strategic policies and carefully designed programmes undertaken under other pillars will improve outcomes under this objective, as will pro-active attempts to link safety net interventions to access to agricultural inputs, credit, training and other interventions capable of providing opportunities for the poor to accumulate, diversify and invest in assets.
Increased quality of diets among the target groups through diversification of food	While investment in increasing the production of staple foods will have an immediate, significant impact on the poor, increasing the ability of the poor to access sufficient protein and micronutrients through varied, nutritious diets is necessary to ensure sustainable gains in the battle against poverty, hunger and malnutrition.

3.4.1 Operational plan for CAADP's FAFS

For the success of the Framework, a number of tools have been specifically developed to provide support to country CAADP implementation programmes for CAADP's FAFS component. The FAFS tools include, but are not limited to:

- The Livelihood-based Participatory Analysis (LiPA)
- An implementation guide for country roundtable
- A template for the country programme design
- Monitoring and evaluation tool.

Following a two week capacity development meeting of CAADP focal points, African Universities, Regional Economic Commission representatives, international experts, AU/NEPAD staff and University of KwaZulu-Natal staff in March 2009, FAFS indicators were identified for tracking the scale of food insecurity in country, setting targets and measuring progress (Figure 3.3). While it is acknowledged that the indicators do not measure all aspects of food insecurity and vulnerability, they are simple, easy to measure, mostly available in Demographic Health Survey data and comparable across countries and regions (AU/NEPAD, 2009e).

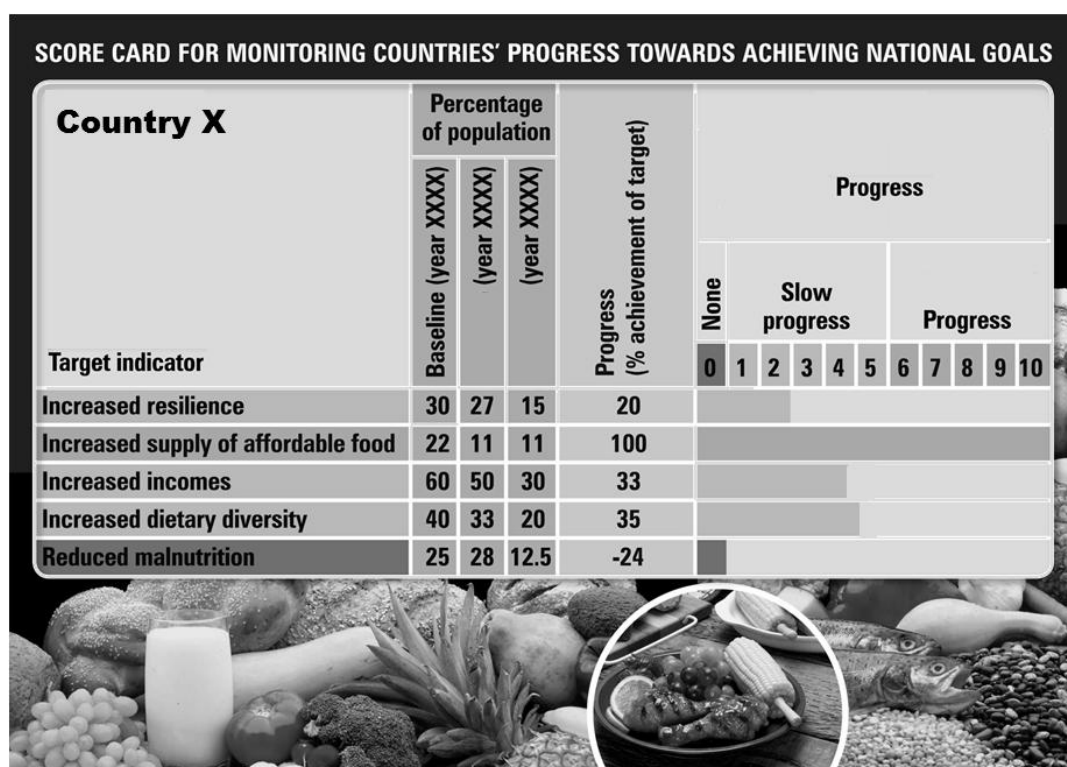


Figure 3.3: Framework for African Food Security (FAFS) score card (Hendriks, 2011).

The indicators will be used for making informed decisions, in country stock-taking, analysis, scenario planning, measuring, monitoring and peer review through the ReSAKSS web page (www.resakss.org). The indicators will also help countries in determining the magnitude and future outlook of food price increases, assessing the impact of higher prices on household food security and determining the proportion of the population likely to be affected by food crises (AU/NEPAD, 2009e). These indicators will also be included in models for predicting the impact of various proposed and implemented policies and programmes under CAADP to evaluate the impact of such interventions on household food security (AU/NEPAD, 2009e).

CHAPTER 4: STUDY METHODOLOGY

4.1 Background to the AU/NEPAD's early high food price workshop

In recognition of the crisis caused by the high food prices, the AU/NEPAD invited representatives from 16 African countries to a workshop convened on the 20th to 23rd of May, 2008 in Johannesburg, South Africa (AU/NEPAD, 2009d). The criteria used to select participating countries were that the country:

- Was likely to be adversely affected by rising food prices
- Had launched, or was advanced in, the CAADP roundtable process
- Demonstrated readiness for initiating a response strategy or program to address high food prices
- Showed high levels of chronic malnutrition and experienced a worsening situation due to rising food prices
- Demonstrated interest in participating in the workshop.

Each delegation was invited to send four experts from government departments related to agriculture, food security, finance and other relevant ministries. This was seen as essential for in-country implementation of programmes after the workshop. In addition, considerations of regional representation led to a balance across Eastern, Southern and Western Africa.

The main goal of the workshop was to assist the governments of the selected African countries to identify and formulate appropriate national programmes to mitigate food insecurity and manage rising food prices. The workshop was an important milestone in building a coordinated African agriculture and food security response to high food prices within the framework and principles of CAADP and CAADP's FAFS.

Specifically, the workshop aimed to (AU/NEPAD, 2009d):

- Share country experiences regarding rising food prices, government priorities, policies and action programmes, and implementation problems or constraints and their impact on food security

- Raise awareness of the various country policy options, programme actions and implications to facilitate appropriate policy decisions at a national level
- To expose participants to the newly developed CAADP FAFS and its elements so as to encourage countries to design, develop and implement food security programmes as set out in the FAFS document
- To identify needs and opportunities for external financial assistance (for example, a Special World Bank Emergency Fund that offered \$10 million per country) and technical support to national governments
- Share lessons and best practices on effective planning and implementation of food security programmes during the crisis and beyond.

It was expected that governments would design policies and action plans to address rising food prices through the workshop, including:

- Draft proposals for concrete short-term and medium-term measures to improve food security for further development in-country after the workshop
- Implementation plans for finalising the preparation and financing of the proposed interventions.

The country delegations were asked to prepare draft plans prior to the workshop. Introductory plenary sessions presented an introduction of the FAFS, information on the food crisis, predicted trends for price and food security and high food price potential responses. Following these sessions, the country teams worked on the refinement of their draft plans with the support of regional and international experts. The refinement of the draft was guided by the four elements of FAFS or thematic areas of FAFS. On the third day of the workshop, the participants presented the country plans in regional discussion groups. Summaries of the regional discussions were presented on the final day of the workshop. At the time of the workshop, only Rwanda had signed the CAADP compact, in late 2007.

4.2 Country selection for the current study

This study set out to investigate if country investment plans (CIPs) mitigated high food prices through improved household risk management strategies in five of 16 African countries that were invited to the AU/NEPAD high food price workshop. These five African countries were Ethiopia, Kenya, Malawi, Rwanda and Uganda. The first criterion for inclusion in this study

was that countries should have participated in the AU/NEPAD high food price workshop. The second criterion was that countries should have signed the compact and elaborated on a country investment plan by December 2010. Ethiopia, Kenya, Malawi, Rwanda, Sierra Leone and Uganda met this criterion. However, it was decided to exclude Sierra Leone as this was the only West African country that met the criteria. Sierra Leone was also excluded because their CIP narrowly focused on a rice production area, while other countries had a bigger focus.

4.3 Methodological approach

This comparative narrative study was conducted between May 2008 and December 2010. The study set out to answer four sub-problems, namely:

- What was the impact of high food prices in the five selected countries?
- How did the five countries respond to the 2008 food price crisis regarding providing for immediate needs and protecting vulnerable groups from food insecurity?
- How many early actions were included in country compacts and agriculture and food investment programmes?
- Do country investment plans (CIPs) include risk management programmes that will protect vulnerable groups against high food prices in future?

The involvement of the researcher in the AU/NEPAD high food price workshop and subsequent engagement in various CAADP processes provided a unique opportunity for this innovative study. The 2008 AU/NEPAD conference offered an interesting window into public decision making in the presence of political and economic stresses. The first-hand engagement with representatives of national governments offered an unique chance to concurrently observe the unfolding of the food price crisis and the emergence of CAADP CIPs. This gave rise to the possibility of analysing the iterative process of CIP development.

This innovative study integrated qualitative, content and thematic analysis (Banks, 2007). Content analysis or textual analysis refers to a methodological approach used to analyse the content of documents (Banks, 2007:44; Dane, 2011:275; Flick, 2009:323). Chase (2011:425) and Patton (2002:453) have explained that content analysis is a qualitative data reduction and sense-making effort which takes a volume of qualitative material and identifies core consistencies and meanings. Dane (2011:283) has warned that using content analysis requires

that a researcher take a series of decisions, before data collection, about units of analysis and observation, sampling techniques and coding. Theme analysis refers to the process of searching for patterns or themes in documents (Patton, 2002:453).

The methodology applied was largely qualitative, except where secondary data regarding price trends were analysed. The use of a quantitative method for analysing price trends provides a picture of the impact of high food prices and national food security in these five countries. Flick (2009:32), Denzin and Lincoln (2005:17), Gibbs (2007:7), Silverman (2010) and Williams and Vogt (2011:327) argue that neither qualitative nor quantitative analysis provides a complete picture on its own. Quantitative analysis enables observation of price trends, while qualitative analysis goes beyond figures, clarifying underlying meanings in the quantitative data (Aloe and Becker, 2011:374; Macdonald, 2008:294). Roshan (2009) stated that both qualitative and quantitative data methods are important for comparative studies. Where both methods are used, the two methods complement each other to deepen the analysis (Patton, 2002:432; Vogt *et al.* (2011); Williams and Vogt, 2011:327).

A qualitative or comparative narrative approach is appropriate to compare documents, such as notes, published and unpublished reports, across countries in time (Patton, 2002:432). The challenge of qualitative data analysis lies in making sense of high volumes of data (Macdonald 2008:294; Patton, 2002:432). This involves reducing the volume of raw information, sifting trivia from significance, identifying significant patterns and structuring a framework for communicating the essence of the findings (Creswell, 2007:141-142; Macdonald, 2008:432). Qualitative data analysis has no set rules for analysis (Patton, 2002:432). In such analyses, researchers need to establish innovative analytical frameworks for consistent context specific analysis. The four elements of the CAADP FAFS provide a natural choice of lens for analysis. The use of the CAADP FAFS elements as a framework of analysis adds to the uniqueness of the study. No published research is available that compares national CIPs or evaluates their effectiveness regarding the ongoing high food prices.

In this study, qualitative comparative analysis refers to analysis of data from different countries to identify similarities and or differences (Flick, 2009:135; Gibbs, 2007:80). As stated by Patton (2002:479), qualitative comparative analysis focuses on making comparisons to generate explanations. Ragin (1987) and Marshall and Rossman (2011:120) point out that

qualitative comparative analysis has been widely used when making comparisons across a number of cases. Table 4.1 shows the overall outline of the research methodological approach.

Qualitative comparative analysis was applied to examine the emerging ideas or patterns between different stages of development of the country action plans, borrowing ideas from Zimmermann *et al's.* (2010) applied comparative qualitative analysis of the influence of agricultural policies in Sub-Saharan Africa.

4.4 Documents and data collection

Documents for this study refer to unpublished and published reports (including notes, annual reports and online reports, public records, expert opinions, articles, theses and dissertations) that have been used for data collection (Green *et al.*, 2006; Flick, 2009:255; Macdonald, 2008:287). The selection of documents analysed in this project was based on Scott's (1990) criteria for assessing the quality of documents for use in research (Flick, 2009:257). The criteria used include (Flick, 2009:257):

- Authenticity -- is the evidence genuine and of unquestionable origin?
- Credibility -- is the evidence free from error and distortion?
- Representativeness -- is the evidence typical of its kind?
- Meaning -- is the evidence clear and comprehensive?

Guided by the above criteria, data used for this study were sourced from reputable African and international organisations, and published documents (Table 4.2). Professor Richard Mkandawire, then Head of CAADP, assisted with the collection of data and documents by distributing a survey questionnaire (Appendix D) to relevant focal point persons. Telephonic follow-ups were made to all country representatives who either did not respond to the questionnaire or whose responses needed further clarification. Data sourced through questionnaire was used to supplement data sourced from documents and personal discussions.

Table 4.1: Overall outline of research methodological approach, 2011

Sub-problem	Data collected/information gathered	Analytical method/approach	Specific approach
What was the impact of high food prices on populations in the five selected countries (Ethiopia, Kenya, Malawi, Rwanda and Uganda)?	High food price impact information; household coping strategies information and food price indices data from relevant documents (particularly for staple foods)	Qualitative and quantitative (to a very limited extent)	Content analysis Comparative and trends analysis Microsoft Excel for drawing graph(s) and table(s)
How did the five countries respond to the 2008 food price crisis with regard to providing for immediate needs and protecting vulnerable groups from food insecurity?	High food price policy responses: Short; Medium- and Long-term responses. Poverty and malnutrition data before and after the 2008 food price crisis	Qualitative and, to some extent, quantitative (e.g. analyses of malnutrition and poverty data) FAFS elements	Content analysis Thematic analysis FAFS elements
How many early actions were included in country compacts and agriculture and food investment programmes?	Information on proposed actions during May workshop and actions agreed upon in the Compacts and investment plans.	Qualitative comparative FAFS elements	Comparative analysis Thematic analysis FAFS elements
Do country investment plans include risk management programmes that will protect vulnerable groups against high food prices in future?	Information on different priorities regarding risk management and resilience.	Qualitative comparative analysis of CIPs against FAFS options	Comparative analysis Thematic analysis FAFS elements

Table 4.2: Sources of data and information used in the study, 2011

Name of institution	Information or data collected*
African Agricultural Markets Programme (AAMP)	Existing consumption patterns; import share of staple food prices; household changes in consumption in response to price shocks.
African Development Bank (AfDB)	Impact of high food prices; Country responses to high food prices; and food price data
African Union/New Partnership for Africa's Development (AU/NEPAD)	Country responses to high food prices; food price indices; CAADP and FAFS related information
The Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)	Impacts of high food prices, country responses to high food prices; and food price data
Department for International Development (DFID)	Information on high food price policies through its discussion papers.
Food and Agriculture Organisation (FAO)	Impacts of high food prices, country responses to high food prices; and food price indexes
International Food Policy Research Institute (IFPRI)	Impacts of high food prices; Households' high food price experiences; Country responses to high food prices; and food price data/indices
Overseas Development Institute (ODI)	Country responses to high food prices in Africa
Regional Economic Communities (RECs): Common Market for Eastern and Southern Africa (COMESA)	Food price data
Regional Strategic Analysis and Knowledge Support System (ReSAKSS)	Food security indicators
United Nations (UN)	Millennium Development Goals
World Food Programme (WFP)	Country responses to high food prices; Food prices
World Bank (WB)	Impacts of high food prices; and Country responses to high food prices/indices

*denotes that where the analysis draws on specific reports and data, these are cited in the text that follows.

With regard to sub-problem three and four, initial data were collected during presentations from the May 2008 workshop. Other data were collected from workshop reports, CAADP compacts, CIPs and CAADP technical reviews. Each CIP was reviewed to extract information on the action plans for the country. Upon reading the CAADP compacts and CIPs, the researcher collected all the action plans designed to mitigate high food prices that were translated from the early food price workshop. During the workshop, all three regions (Eastern, Southern and Western Africa regions) presented their high food price action plans along with individual country action plans. While these regions and invited countries were presenting, the AU/NEPAD team, including the author of this study, were recording all the plans for the each region and country. Later, the collated information was published in the NEPAD address (www.nepad.org). For sub-problem three, additional data for malnutrition and poverty level was collected from other sources, including the ReSAKSS 2010 and United Nations' 2010 and 2011 documents. Therefore, most of the data for these sub-problems was sourced through documentation analysis.

4.5 Data analysis

Data analysis was sequenced to address the sub-problems of the study, as indicated in section 4.1 and Table 4.1. With regard to sub-problem one, data sourced through documents were analysed through content analysis. Upon reviewing relevant high food price documents, information regarding food price changes and impacts on households was collected, synthesized, interpreted to give meaning and recorded in the results section. Similarly, information regarding household coping strategies was also synthesised and presented in section 5.1 of the results. Microsoft Excel was used to draw graphs and tables of food price data. Data on food price changes were used to determine the impacts of high food prices on households, particularly with regard to food access and consumption. Qualitative comparative analysis was also used to compare food price trends and impacts of food prices across study countries.

With regard to sub-problem two, all the data collected from African countries (through questionnaires), local and international organisations on African country responses to high food prices were used. All high food price policy responses were categorised into short, medium and long-term responses, as set out in the FAFS, using content and theme analysis. The African country responses were grouped into three main categories: trade, consumer and producer-oriented interventions, using both content and thematic analysis. Using content, comparative and thematic analysis to determine how appropriate the country responses were, the study analysed whether the interventions protected the vulnerable from consumption reductions due to constrained food availability and reduced purchasing power; provided safety nets for those in need; promoted sustainable livelihoods; or led to social transformation. The study also looked at the probable contribution of the interventions towards reducing poverty and hunger levels or protecting poor households from deepened poverty and malnutrition. Quantitative and qualitative comparative analysis was used to compare poverty and malnutrition levels, before and after the 2008 the food price crisis, to determine whether the responses protected the vulnerable groups from price increases. Most of the data used to determine the appropriateness of the interventions was drawn from the ReSAKSS website¹ and analysed through content analysis. Findings for sub-problem two were presented in section 5.2 of this study.

¹Note: The ReSAKSS website (www.resakss.org) does not provide a page-specific html address

Data collected from the food price workshop, CAADP compacts and CIPs were used to answer sub-problem three of this study. While this sub-problem largely focus on risk management-related² early actions - and similar programmes were merged together, but Appendix E gives the fuller list of all programmes proposed at the early food price workshop. First, data or programmes were classified into short, medium and long-term action plans using content analysis and the FAFS framework as a tool for classification. Second, the risk management-related action plans from the food price workshop were then matched along with action plans from CAADP compacts and CIPs, using content and pattern or thematic analysis. Third, a matrix was developed using Microsoft Excel to clearly see the systematic translation of action plans from the high food price workshop into CAADP compacts and CIPs. Fourth, action plans across the three stages (high food price workshop, CAADP compact and CIP) were compared across and between countries, using qualitative comparative analysis. Comparative analysis was also used to compare action plans between the three stages for the same country to see which plans were omitted in the move to CAADP compact and CIP. Comparative analysis was done within country and between countries. Findings for sub-problem three are presented in section 5.3.

Data collected from the CIPs were used to answer sub-problem four. CIPs were grouped around four FAFS elements using thematic analysis. A matrix was developed to see if the interventions contributed to any of the FAFS elements. From the matrix, content and comparative analysis were used to see which of the action plans contributed to improving risk management, as set out in the FAFS. FAFS was also used as a tool of analysis to see whether an action plan improved risk management, increased food supply, increased economic opportunities and improved the quality of diets. Through FAFS, risk management programmes were further classified and grouped into three household risk management options, as set out in the FAFS, including improving early warning systems and crisis prevention, options for improving emergency responses and options for strengthening risk management policies and institutions. Tables 4.3 identify immediate, medium term and long term policies or options, with demonstrated efficacy in food security risk management in different contexts, that could address household risk management as set out in the FAFS. Findings for this sub-problem are presented in section 5.4.

² Guided by FAFS as a tool for analysis in this study, risk management programmes were also gathered from other FAFS elements, including: supply of affordable food, increase economic opportunities and increase quality of diets as in the AU/NEPAD workshop proceedings.

Table 4.3: FAFS framework or options for addressing household risk management (AU/NEPAD, 2009a)

Immediate options for improving risk management as per FAFS document:
Related to short-term
<p><i>Options for improving early warning systems and crisis prevention</i></p> <ul style="list-style-type: none"> • Comprehensive risk assessments at national, district and community levels followed by the formulation of risk-reduction strategies at all administrative levels • Facilitation of peer learning among African policymakers through the CRTs, based on best practices in policy design and implementation • Invest in village level livestock disease monitoring, reporting and prevention mechanisms <p><i>Options for improving emergency responses</i></p> <ul style="list-style-type: none"> • Unconditional transfers of food, cash, and other items where appropriate • Increased utilization of domestic and regional trade to stabilize food supplies (and prices) in affected markets <p><i>Options for strengthening risk management policies and institutions</i></p> <ul style="list-style-type: none"> • Immediate follow-up on country priority action areas in Hyogo Framework for Action
Related to medium-term
<p><i>Options for improving early warning systems and crisis prevention</i></p> <ul style="list-style-type: none"> • Strengthening of sectoral information monitoring systems relevant to food and nutrition • Institutionalization of food insecurity risk management systems at national, regional and continental levels <p><i>Options for improving emergency responses</i></p> <ul style="list-style-type: none"> • Development of broad-based logistics capacities, decentralizing functions where feasible • Development of protocols to enhance coordination among government, civil society, and international humanitarian actors • Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans <p><i>Options for strengthening risk management policies and institutions</i></p> <ul style="list-style-type: none"> • Formulation of improved risk management policies, including proactive review and use of alternative instruments to deal with crises, e.g., food and financial reserves, weather-based insurance and futures options • Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans • Establishment of objective criteria for selecting among resource transfer modalities, focusing on in-kind food and cash transfers • Development of policies and institutions for improved management of food surpluses
Related to long-term
<p><i>Options for improving early warning systems and crisis prevention</i></p> <ul style="list-style-type: none"> • Establishment of national, regional and Pan-African emergency response mechanisms including trans-boundary animal disease control • Integration of local capacities and coping strategies into national and regional crisis preparedness strategies <p><i>Options for improving emergency responses</i></p> <ul style="list-style-type: none"> • Strengthening of logistics capacities <p><i>Options for strengthening risk management policies and institutions</i></p> <ul style="list-style-type: none"> • Development of broad-based social protection systems • Strengthening of food security platforms within social protection systems

The next chapter presents results of this study.

CHAPTER 5: RESULTS AND DISCUSSION

This study set out to determine whether selected African country investment plans mitigated high food prices through improved risk management strategies. The study also assessed whether the five study countries translated their initial programmes from the 2008 AU/NEPAD workshop into CAADP compacts and CIPs. The findings of this study are analysed and discussed in relation to the sub-problems.

5.1 The impact of high food prices in five selected countries

Average global real monthly food price changes presented considerable threats to the purchasing power of the poor and households who largely rely on purchased and traded staple foods. There was a concern that local food prices would mirror the international food prices - as discussed in section 2.7 of this study. Between January 2007 and March 2008, the FAO Food Price Index (FPI) of the selected African countries showed upward trends, with higher increases from mid-2007. The magnitude of these upward trends differed by country and commodity (Figure 5.1). Seasonality could have influenced national and regional food price increases. For example, the price change patterns show that countries were affected differently by the food prices, with Ethiopia and Kenya experiencing higher food inflation compared with other countries under study (Figure 5.1). The degree of price transmission from international to domestic markets depends on whether a country's main staple is traded or non-traded; is a landlocked nation or not; and whether a country is a net importer or exporter of food (ASARECA, 2008; Minot, 2011). The level of import dependence across the study countries drove price transmission from global to domestic markets. Countries (Table 5.1) who import staple foods face greater risks of price transmission due to market integration.

The FPI of the selected African countries formed over 50 per cent of the CPI between August 2007 and August 2008, suggesting that a large share of domestic expenditure was on food (Table 5.2). This high increase in the percentage FPI would be linked with the reliance on a few imported staple foods in these countries. Households with diversified staple foods have more options for food and can substitute one staple food for another, thereby stabilising market prices due to substitution effects. Reducing the price of staple foods can lead to a drop in the FPI (ASARECA, 2008).

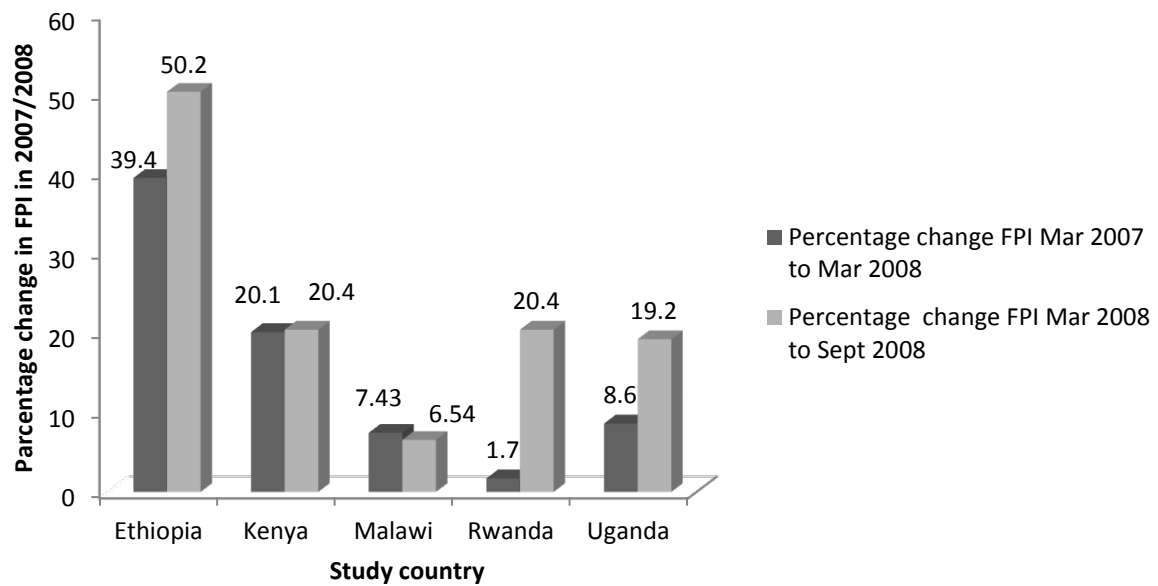


Figure 5.1: Uganda CIP’s contribution to FAFS elements, 2011

It is evident from the food price indices in Figure 5.1 and Table 5.2 that households in the countries under study experienced unprecedentedly high food prices. Between March 2007 and March 2008, the FPI grew significantly in Ethiopia and Kenya compared with Malawi, Rwanda and Uganda (Figure 5.1). In Malawi, Rwanda and Uganda, the FPI increase was less than 10 per cent in the same period (Figure 5.1). The significant increase of FPI in Ethiopia and Kenya suggests a strong link between the global and domestic markets of these countries, while the relatively low increases of FPI in Malawi, Rwanda and Uganda mean that there was weak association between global and domestic markets. Weak associations between global and domestic food prices could be explained partly by the fact that price indices comprise different food items and that some food items are traded while others are not tradable. However, lower food price increases could also be associated with whether there are available food alternatives (like cassava and teff, which are not traded internationally), and the level of national stocks that can be released.

Between March 2008 and September 2008, Rwanda and Uganda also exhibited significant food price changes compared with Ethiopia, Kenya and Malawi, although Ethiopia and Kenya still had the highest FPI (Figure 5.1). Ethiopia, Kenya and Malawi rely on maize imports from South Africa to fill the gaps, where maize is traded on the international market,

leading to direct price transmission from international markets. In Uganda, maize is not the main staple food, while Rwanda imports food from Uganda.

Price changes between March 2007 and March 2008 were highest for traded grains and lowest for non-tradable food commodities (Figure 5.1). Data in Figure 5.1 indicate that maize accounted for the largest increase in domestic food prices between March 2007 and March 2008. Commodities such as bananas and teff - which are staple foods in Uganda and Ethiopia respectively - exhibited the lowest food price increases over the same period – probably because they are non-export crops and so not tied to world prices.

Table 5.1: Summary of the import share of major food staple (adapted from Ariga et al., 2010; Haggblade and Dewina, 2010; Minot 2010a; Minot 2010b and Rashid, 2010)

Country	Commodity	Imports ('000 tons)	Imports as a percentage (%) of apparent consumption
Ethiopia	Maize	24	0.7
	Wheat	877	31.3
	Teff	0	0.0
	Sorghum	7	0.5
Kenya	Maize	108	3.5
	Wheat	612	63.1
	Potatoes	0	0.0
	Plantains	0	0.0
	Beans	40	8.2
Malawi	Maize	63	2.8
	Cassava	0	0.0
	Sweet potatoes	0	0.0
Rwanda*			
Uganda	Maize	33	2.7
	Cassava	0	0
	Plantains	0	0
	Beans	3	0.7
	Wheat	365	95.8

**Similar data for Rwanda was not found from the AAMP studies.*

Note: Apparent consumption is defined as production plus net imports

Table 5.2: Monthly price changes and contribution to the cost of the typical food basket between August 2007 and August 2008 by country and commodity (Adapted from WFP, 2008)

Country	Main staple(s)	Number of months included in the calculations	Staple food energy contribution (%)	Month Aug 07-Aug 08 (average % change from 12 months)	Monthly average (% change from 12 months)	Monthly average (% change from 5 yrs average)	Food expenditure or contribution to the cost of the food basket (%)	
							Individual commodity	Cumulative percentage number
Ethiopia	Maize	7	21	241	147	148	31	58
	Wheat	7	18	120	74	77	13	
	Sorghum	7	10	262	133	133	13	
Kenya	Maize	4	35	71	52	20	18	18
Malawi*	-	-	-	-	-	-	-	-
Rwanda	Sweet potatoes	7	16	-26	-40	-34	-6	-11
	Plantains	7	16	-17	-23	-17	-4	
	Cassava	7	14	-22	-25	-13	-3	
	Beans	7	12	29	28	38	3	
	Irish potatoes	7	11	7	-11	2	-1	
	Sorghum	7	7	32	10	16	1	
Uganda	Plantains	4	18	0	0	-14	0	3
	Cassava	4	13	7	5	10	1	
	Maize	4	11	12	3	24	0	
	Sweet potatoes	4	10	3	-12	-12	-1	
	Beans	4	7	56	41	72	3	

Note: *Data for Malawi were missing from the WFP (2008) study from which Table 5.2 was derived.

The rise in prices of staple foods in Kenya could be associated with the post-election violence that took place after the 2008 national elections and displaced a number of farmers, constraining production. Ethiopia has been facing continuous drought, which has affected production. The migration of Somali people into Ethiopia puts pressure on food resources. The relatively lower food price inflation experienced in Malawi, Rwanda and Uganda can be explained in that Malawi was a net exporter of maize at the time of high food prices, while Rwanda and Uganda relied on local and non-tradable foods like banana.

Higher food prices may have forced households to change their consumption patterns and behaviour. As high food prices were not matched by income and wage adjustments, many households would have been forced to adjust expenditure to meet the market food price demands. For the poor, a significant proportion of household income is spent on food, leaving little to spend on other goods and little flexibility in household budgets- with maize as one of the staple foods contributing the highest to the cost of the food basket in Ethiopia and Kenya between August 2007 and August 2008 (Table 5.2). Harttgen and Klasen (2012), analysed the nutritional impacts of price and income related shocks in Malawi and Uganda and confirmed that staple food price increases have a particularly high impact on household food insecurity and poverty. However, the composition and diversity of food consumption patterns play a significant role in mitigating food price shocks (Benson *et al.*, 2008b; Silmer, 2009). Uganda, for example, had the most diversified food basket (including cassava, matoke, beans, maize, rice and sweet potatoes) in all of the five study countries. As such, Uganda consumers had many local food alternatives available to them, even when international maize and rice prices increased. As a result, Uganda consumers faced little pressure and the Ugandan government remained relatively non-interventionist during the food price crisis.

Table 5.3 shows the percentage of total household expenditure on food in 2008, while Table 5.2 gives a detailed breakdown of the cost of food relative to the household budget between August 2007 and August 2008. It is important to note that figures indicated in Table 5.3 report ASARECA's (2008) findings, calculated from the national household surveys (albeit that were conducted in different years by each country). Table 5.3 shows that in Ethiopia, Kenya, Malawi and Rwanda, households spent over 50 per cent of their income on food. On average, Ugandans spent 45 per cent of their income on food in 2008. This figure is significant when one considers that it was calculated as an average. Surprisingly, Table 5.3 indicates that rural households spent more of their income on food than urban households.

Given that previous studies by ECOSOC (2009) and Kamara *et al.* (2009) argued that if the poor spend a significant proportion of their income on food, rural households were, on average, marginally poorer than urban households.

Table 5.3: Expenditure on food as a percentage of total household expenditure (adapted from ASARECA, 2008:22; Okello, 2009)

Country	National	Rural	Urban
Ethiopia	66	68	55
Kenya	51	62	40
Malawi	56	45	58
Rwanda	68	77	49
Uganda	45	50	34

Malawi was notably the only country where rural households spent less of their income on food than urban households. This could possibly suggest that rural households from Malawi consumed directly from their gardens or farms – such consumption is often not accounted for in formal surveys - nevertheless, close to 60 per cent of household income was spent on food during this period. Although there is no consensus over the international threshold for the proportion of income spent on food, international literature reports that households that spend 60-80 per cent of their income on food are vulnerable to food price increases and food insecurity (Rapsomanikis, 2009). Therefore, it is evident that higher food prices had serious impacts on the food security situation of households in Africa, forcing them to adjust their food consumption and turn to local and indigenous foods for survival.

As reported by Barrett and Dorosh (1996), changes in commodity producer prices have major welfare consequences as well, particularly among small scale farmers, who make up a large share of the poor in sub-Saharan Africa. Perhaps because a substantial proportion of farmers are net food buyers, their real incomes may decline as food prices increase, while real income gains accrue mainly to large farmers producing a marketable surplus. Rural African households are typically surplus food producers (therefore, net sellers), but a lack of purchasing power among households, from higher commodity prices, constrains the buying power of rural households, so demand for produce drops. Jayne *et al.* (2010) also stated that the buyers of staple grain are rural households who generally make up 50 to 70 per cent of the rural population and these households may be higher in drought years and lower in good

production years. Therefore, many poor rural households are net buyers of staple foods. Higher food prices should normally be good news for farmers. But the increases in food prices in 2008 were accompanied by higher energy, fertiliser and fuel costs, that threatened the viability of their production, eroding potential price gains, creating additional hurdles, increasing risk and provided a disincentive for a supply-response to both food shortages and higher prices.

In summary, the percentage changes in food prices for Ethiopia and Kenya were significant between March 2007 and March 2008, while in Malawi, Rwanda and Uganda, the FPI increased by less than 10 per cent. With the exception of Malawi, higher food prices had a greater impact on rural households than on for urban households, as the proportion of expenditure on food for rural households was higher than for urban households (Table 5.3). In Malawi, urban households spend proportionally more of their income on food than rural households do. As indicated, Malawi increased their agricultural input subsidies to rural food insecure households who, therefore, continued to produce food and spend less on purchased foods.

The welfare effects of food price changes depend very much on the household behaviour with regard to the production, consumption, sales and purchase of food. Although food policy in many African countries focuses predominantly on maize, vulnerable households consume a wide range of food staple (Dorosh *et al.*, 2009). Drought-tolerant staples such as cassava, sorghum, millet and sweet potatoes allow consumers to substitute these foods for maize. However, price data for these crops is seldom available for analysis (Dorosh *et al.*, 2009; Haggblade *et al.*, 2012).

5.2 Country responses to the 2008 food price crisis regarding provision for immediate needs and protecting vulnerable groups from food insecurity

In May 2008, the AU/NEPAD, in conjunction with Development Partners, organised a four-day high food price workshop to build a coordinated country response to high food prices, using the newly released CAADP's Framework for African Food Security (FAFS). Faced with higher food prices that enhanced food insecurity and led to social unrest, African

governments and international organisations took actions to cope with immediate needs for food. In this sub-section, country responses to high food crises are analysed and discussed.

This sub-section of the study evaluated whether country actions were appropriate in terms of providing for immediate needs and protecting vulnerable groups from food insecurity. The potential contribution of the action plans towards the welfare of the vulnerable groups was investigated. To determine this potential, the following data, where available, were considered but not limited to: the types of tariffs that were introduced; the costs of staple commodities; country shortfalls in terms of demand and supply; the sources of country imports; the extent to which social protection programmes were scaled up; changes in the levels of malnutrition; and the situation of government revenue. The key focus of the analysis was the assessment of the probable contribution of the programmes in reducing poverty and hunger levels. This sub-problem also focused on the contribution of the interventions towards protecting poor households from deepened malnutrition.

If the policy actions indicated in Table 5.4, regarding provision for immediate need and protecting the vulnerable groups against food insecurity, were appropriate, the anticipated effects of the policy actions will be positive. Expectedly, appropriate interventions could lead to a decline in poverty levels, reduced levels of malnutrition, reduced food imports and better prices for staple food commodities. The effectiveness of the programmes implemented by countries is discussed in terms of the international literature and theory.

Country responses to high food prices were varied (Table 5.4). The responses were largely aimed at managing high food prices, improving access to food and providing inputs for increasing agricultural output of smallholders. The synthesised findings in Table 5.4 show that governments' responses were reactive, suggesting that high food prices came as a shock and caught governments off-guard, partly because this crisis was not a typical weather-related crisis - which African governments are used to facing. Many responses (for example, staple food export bans, consumer subsidies, social protection programmes, release of reserve food stocks, etc.) were mitigating actions, meaning that governments wanted to buffer poor households from consumption reduction and protect poor households from price increases. All five countries introduced food export bans/restrictions, particularly on staple foods (Table 5.4) as observed by Wodon and Zaman (2009).

Table 5.4: Synthesis of policy responses to high food prices in 2007/08 in Ethiopia, Kenya, Malawi, Rwanda and Uganda

Policy response*	African country				
	Ethiopia	Kenya	Malawi	Rwanda	Uganda
Short term					
Administer price control/consumer subsidies	✓	✓	✓	✓	
Cash transfers	✓	✓	✓	✓	
Food-for-work	✓	✓	✓	✓	
Food rations, stamps and vouchers	✓	✓			
Lower import tariffs for fertiliser/seeds		✓	✓		
Lower import tariffs		✓		✓	
Increase supply via food imports	✓	✓	✓	✓	
Introduce staple food export bans/restrictions or taxes on staple foods	✓	✓	✓	✓	✓
Introduce/adopt producer price supports and subsidies		✓		✓	✓
Introduce/scale up school feeding programmes		✓	✓	✓	
Release food reserves stocks	✓	✓		✓	✓
Reduce taxes on food grains	✓	✓			✓
Medium term	Ethiopia	Kenya	Malawi	Rwanda	Uganda
Adopt input subsidies		✓	✓		✓
Establish food reserves and release policy	✓	✓			
Establish variable tariffs or variable export subsidies/taxes	✓	✓			
Increase/support domestic food production		✓	✓		✓
Long term	Ethiopia	Kenya	Malawi	Rwanda	Uganda
Invest in marketing infrastructure, institutions and information	✓				

*Country policy responses as adapted from country sources and different data sources including: ASARECA, 2008; FAO, 2008a; Meijerink *et al.*, 2009; Wiggins *et al.*, 2010; and World Bank, 2008b.

Export restrictions or bans were popular measures implemented in the early food crisis period, but are potentially harmful to achieving domestic food surpluses. If the international price of the restricted commodity is higher than the domestic price, this will flood the supply of the commodity in the country, given the existing demand (Ackello-Ogutu, 2011). The market becomes smaller and more volatile, thereby lowering the price of the commodity (FAO, 2008b). The export ban could then act as a disincentive for production. Export restrictions or bans exacerbated the food crisis and prevented neighbouring countries from

importing the restricted commodities, inhibiting future food security through creating disincentives for farmers.

Table 5.4 shows that four of the five countries introduced food price controls during the 2007/08 food price crisis. This policy measure, despite keeping prices low, might have discouraged farmers from producing more food in the following season. If the sale price is lower than the cost of production, farmers will be discouraged from producing the commodity. Therefore, the consequence of price control could likely to be a reduction in supply in subsequent seasons, which may lead to even higher food prices. In fact, FAO (2011a) reported that the January 2011 FAO Food Price Index was higher than the 2008 Food Price Index, suggesting that farmers were discouraged from producing for the next seasons because of the 2007/2008 price control response by governments.

During the 2008 food price crisis, four of the five countries introduced cash transfers and food-for-work programmes (Table 5.4). Uganda was the only country that did not introduce cash transfers and food-for-work programmes. However, Northern Uganda already had a cash transfer programme. Creti (2010) reported that cash transfers in Uganda had a negligible impact on prices of commodities. The main concern of governments was to support poor households. It should be noted, however, that cash transfers are more appropriate if implemented in the presence of well-functioning markets (Ackello-Ogut, 2011; FAO, 2008b). If commodities are not available in the market, then cash transfers are not an appropriate intervention.

Generally, safety net programmes (cash transfers and food assistance) do not only reduce and mitigate risk, but can improve food security because, if carefully designed, they can support poor households' access to food. For example, the Productive Safety Net Programme (PSNP) in Ethiopia is reported by CFS HLPE (2011) benefit poor households in remote areas who receive food transfers and beneficiaries in the more developed areas who received cash transfers. However, if not carefully designed, safety nets programmes may place large demands on financial resources and institutional capacity which is often lacking within the study countries, including Ethiopia. If there are no food stocks, cash transfers may be inappropriate. Nonetheless, safety net programmes were appropriate policies for the most affected food insecure groups because these transfers mitigate risk and make food accessible.

Safety net programmes included the provision of different packages of support to poor producers, like input subsidies in the case of Malawi. In Ethiopia, safety net programmes included cash transfers, food assistance and public works programmes. The Ethiopian government scaled up these safety net programmes into productive safety net programmes to provide agricultural inputs and helping establish income-generating activities for the poor. In Kenya, school feeding programmes catered for 60,000 children during the high food price crisis (FAO, 2011a). Kenya, Malawi and Rwanda also used social protection programmes to distribute agricultural inputs to targeted farmers (ASERECA, 2008; FAO, 2011a). In Uganda, social protection programmes provided essential nutrition to the most needy in the country.

Social protection programmes helped the poorest access food through cash transfers, direct food assistance in the form of food rations, stamps or vouchers, and school feeding programmes. Intensive nutrition interventions were also included, particularly through school feeding programmes. Findings in Table 5.4 of this study showed that during the crisis, countries that already had social protection programmes extended their coverage, while those that did not have these programmes adopted them as an instrument for improving food access to the poor and other food insecure people.

Actions to remove import restrictions and release food grain stocks into the market may have immediate and favourable effects on consumers and on the economy in general. However, these actions provide only one-time relief. More worryingly, these measures entail revenue losses for the government, which in some countries, could be substantial. For example, the input subsidy programme in Malawi is reported to have cost MK7.2 billion against a budget of MK5.1 billion in 2005/06, leaving the government with a MK2.1 billion budget deficit (Dorward *et al.*, 2010:15). Ackello-Ogutu (2011) and Hendriks *et al.* (2009a) confirm that social protection programmes are important strategies for reducing poverty, but are costly for governments. While lowering tariffs may generate significant gains for the food consumers, it may leave poor net sellers worse off. Evidence can be traced to a Madagascar study where the benefits to poor net rice consumers were estimated to be between 2.0 and 8.7 times the value of lost tariff revenues (Coady *et al.*, 2009). Compared with safety net programmes, lowering import tariffs were more cost effective.

In sum, the policy actions in Table 5.3 suggest that governments intended, not only to ensure that there was adequate and affordable food supply and support for poor households, but also

attempted to stimulate the agricultural supply response through provision of producer input subsidies and price support. However, this does not mean that the intended outcomes of the programmes (that is reducing food prices through increased local production) as a whole were met. Consumer support measures were an effort to reduce the vulnerability of poor households to high food prices and supply side measures to induce a rapid supply response for restoration of balance between food supply and demand, while social protection measures are aimed at providing and protecting food consumption for poor households. Similar observations have been made by Wiggins *et al.* (2010). Country responses for protecting poor households included safety nets, while country actions to prevent or mitigate high food prices in the market included trade or fiscal measures. Country actions, with regard to increasing food availability, included support to producers and input subsidies.

5.2.1 Country interventions and their impact in terms of poverty and malnutrition reduction

Across the five countries, high food prices generally enhanced the development of social protection programmes as a policy response to high food prices. High food prices also favoured a reinvestment in food production to take advantage of the good market, decrease dependency on food imports and increase self-sufficiency. For example, Malawi and Uganda were successful in raising production levels (between 2005 and 2010) through a variety of interventions, including provision of inputs subsidies and price support to producers (Wiggins, 2010). However, the question of what the most effective interventions address high food prices remains largely unanswered (Cuesta, 2011).

This sub-section of the study estimates the changes in poverty and malnutrition levels before and after the 2008 food price crisis. While this study may have attributed reductions in poverty levels with some of the programmes being implemented in the country, it should be noted that imputing causality is not simple as it would include factors that changed between 1990 and 2009, including favourable weather conditions for production.

As indicated in chapter 4, data on poverty and malnutrition levels were not readily available and, as a result, the study used information from different data sources. Table 5.5 shows the poverty and malnutrition levels from a few sources, while Appendix F gives a fuller list of national poverty and malnutrition levels from different sources. As such, the estimates of poverty and malnutrition levels presented below come from different studies. The poverty

rate in East Africa fell from an average of 62.8 per cent in 1990-95 to 54.4 per cent in 95-2003 and 38.6 per cent in 2004, largely driven by a decline in poverty levels in Ethiopia and Kenya (Benin *et al.*, 2010). While poverty levels were already declining before the high food price interventions, poverty levels would have increased during high food prices if there had not been country interventions to protect vulnerable groups from food insecurity.

Table 5.5: Comparative analysis of poverty* and malnutrition levels from the study countries

Poverty Level	Percentage increase/decrease in poverty (%)				
Source	Ethiopia	Kenya	Malawi	Rwanda	Uganda
ReSAKSS (2010)	(-1) (2007-2009)	(0) (2007-2009)	(-2) (2007-2009)	(+1) (2007-2009)	(-3) (2007-2009)
UN (2010)/ UN (2011)	(-9.5) (2004-2010)	(-6.4) (1997-2005)	(-1) (2007-2009)	(-16.9) (2005-2010)	(-6.6) (2005-2009)
Malnutrition level	Percentage increase/decrease of malnutrition children under 5 (%)				
	Ethiopia	Kenya	Malawi	Rwanda	Uganda
ReSAKSS (2010)	(-1) (2007-2009)	(0) (2007-2009)	(-1) (2007-2009)	(-2) (2007-2009)	(-1) (2007-2009)
Underweight level	Increase/decrease of underweight children under 5				
	Ethiopia	Kenya	Malawi	Rwanda	Uganda
UN (2010)/ UN (2011)	(-7.4) (2000-2005)	-	(+3) (2007-2009)	(-3.2) (2006-2008)	(-2.6) (2007-2009)

*The incidence of poverty is calculated as the proportion of the population living below the poverty line of US \$1.25 per day.

5.2.1.1 Changes in hunger and poverty levels in Ethiopia

Analysis of the MDG report for 2010 for Ethiopia (Ministry of Finance and Economic Development – Ethiopia, 2010) showed that the poverty levels declined from 38.7 per cent in 2004/2005 to 29.2 per cent in 2009/2010, reflecting a 9.5 per cent decline in poverty levels (Table 5.5). ReSAKSS (2010) also reported a percentage (one per cent) decline in poverty levels in Ethiopia between 2007 and 2009. The Global Hunger Index (GHI) for 2008 recorded a 1.8 per cent decline in poverty levels, despite 2008 being the year of high food prices. The early food price responses for Ethiopia were appropriate in terms of providing for immediate needs, and somewhat buffered food insecure groups through the provision of social Productive Safety Net Programmes (PSNPs). Similar conclusions were drawn from the MDG report for 2010, which reported that high food price policy responses implemented in

Ethiopia, particularly safety net programmes, protected the food insecure groups from the high food prices (United Nations, 2010b).

The 2010 ReSAKSS data show that in Ethiopia, between 2007 and 2009, there was a one per cent decrease in malnutrition rates of children under five, while the MDG report for 2010 or United Nations (2011) data show that the number of underweight children declined by 7.4 per cent between 2000 and 2005 (Table 5.4). However, the 7.4 percentage decline in underweight children was before the high food crisis and data were not available post-2008. The MDG report for 2010 for Ethiopia reflected that the percentage of stunted children declined from 47 per cent in 2004/05 to 40.5 per cent in 2005/06. Similarly, the percentage of wasted children also declined from eight per cent to 5.9 per cent over the same period. However, USAID (2009) reported that Ethiopia is not likely to meet MDG one by 2015. The USAID (2009) study reported that it was estimated that 4.9 million people in Ethiopia would have required emergency food assistance between January and June 2009. This meant that, if the government of Ethiopia had not introduced measures to protect the vulnerable, more people in Ethiopia would have been food insecure and in need of emergency food assistance.

5.2.1.2 Changes in hunger and poverty levels in Kenya

In Kenya, the national poverty levels are high (47 per cent of the population). ReSAKSS (2010) data (Table 5.5) show that there was no change in poverty levels in Kenya between 2007 and 2009- probably because these figures are both based on the same data and therefore no change expected. However, the national poverty levels declined from 52.3 per cent in 1997 to 45.9 per cent in 2005/06, suggesting a decline of 6.4 per cent (Table 5.5). The 6.4 per cent decrease in poverty is slightly different from the figure (5.5 per cent) reported by the World Bank (2008a) over the same period, indicating a one per cent difference between the two findings. These differences could be as a result of differences in data used by these two authors.

The United Nations Development Programme (UNDP) (2010) found that rural poverty in Kenya declined from 50.7 per cent to 42.2 per cent over 1997-2006/07, while urban poverty increased from 38.3 per cent to 40.5 per cent over the same period. The incidence of poverty in Kenya was expected to increase in 2008-2009 due to post-election violence and high food prices. Government responses to high food prices in Kenya may have cushioned food

insecure people. The increase in poverty in urban areas could be as a result of the government focusing its actions more on rural poor than urban poor. Other reasons for increased urban poverty than rural poverty in Kenya could include, but are not limited to, differences in sources of food, kinds of food consumed, different livelihoods and food substitution in rural areas.

There was no change in the rate of malnutrition in children under five in Kenya between 2007 and 2009 (Table 5.5). Data for underweight children were not available from United Nations (2010b) or MDG (2010) and United Nations (2011) reports. However, the proportion of stunted children declined from 36.9 per cent in 1997 to 34.7 per cent in 2006, while a similar decrease from 22.3 per cent to 20.9 per cent of underweight children was noted during the same period. The 2008-09 Kenya Demographic and Health Survey data also showed that the nutritional status of children under five has improved slightly between 2006 and 2009, with 16 per cent children underweight (Kenya National Bureau of Statistics, 2010).

5.2.1.3 Changes in hunger and poverty levels in Malawi

In Malawi, poverty also declined from 54 per cent in 1990 to about 39 per cent in 2009. Poverty levels in Malawi declined by two per cent between 2007 and 2009 (Table 5.5). The data from MDG (2010) and United Nations (2011) show a one per cent decline in poverty levels in the same period. The MDG report for 2010 for Malawi reported that poverty has been declining steadily since 2005, even though rates of poverty are higher in rural areas (Ministry of Development Planning and Cooperation – Malawi, 2010). Urban poverty declined from 24 per cent in 2005 to 11 per cent in 2007, but increased slightly to 13 per cent in 2008. The decline in poverty levels in Malawi could be attributed to increased agricultural productivity realised through the farm input subsidy programme. This programme was scaled up and expanded to benefit more farmers during the 2007/08 food crisis. The increase in poverty levels in urban areas could be as a result of (but is not limited to) policy responses, not focusing on the urban areas and migration from rural to urban areas, sources of food and livelihoods and the types of food consumed. As rural poor people migrate to urban areas, the number of poor people increases in the urban areas because the rural poor may not be able to afford food in the cities and there is also no land available for own food production (Garret and Cohen, 2008).

In Malawi between 2007 and 2009, malnutrition rates among children under five years of age declined by one per cent, while the number of underweight children increased by three per cent. The number of underweight children in Malawi declined from 25 per cent in 2000 to 14 per cent between 2007 and 2009; yet, despite this decline, malnutrition remains a challenge for the country. The percentage of ultra-poor (persons living below the food poverty line) has declined from 24 per cent in 1998 to about 15 per cent in 2009 (Ministry of Development Planning and Cooperation – Malawi, 2010). The 2010 MDG report for Malawi noted that the prevalence of underweight children in rural and urban areas, showing similar trends. These poverty trends could be as a result of inadequate knowledge in food processing and utilisation leading to hunger and malnutrition (Ministry of Development Planning and Cooperation – Malawi, 2010).

5.2.1.4 Changes in hunger and poverty levels in Rwanda

Poverty levels in Rwanda increased from 57 to 58 per cent, suggesting a one per cent increase between 2007 and 2009. Contrary to these findings, the United Nations (2010b) and United Nations (2011) found a 16.9 per cent decline in poverty levels between 2005 and 2010 (Table 5.5). Moreover, the MDG report for 2010 for Rwanda found that poverty levels declined from 60.4 per cent in 2001 to 56.9 per cent in 2005/06, establishing a 3.5 per cent decline of poverty. Attempts to find which data were used were not successful, but these agencies often use their own datasets for reporting.

The MDG report for 2010 for Rwanda reflected that nearly all Rwandan children show signs of malnutrition (United Nations-Rwanda, 2010). However, malnutrition rates among children under five years of age declined by two per cent, while underweight rates declined by 3.2 per cent between 2007 and 2009. The MDG report for 2010 for Rwanda also reported that the percentage of underweight children declined from 48.8 per cent in 1994 to 24 per cent in 2000, 19 per cent in 2005/06 and 15.8 per cent in 2008. Similar findings were also reported by Vinck *et al.* (2009) who found that malnutrition among children six to 59 months of age was 52 per cent stunting, 4.6 per cent wasting and 15.8 per cent underweight, between 2006 and 2009. In 2006, seven per cent of the households had low Food Consumption Scores (FCS), 28 per cent had moderate Food Consumption Scores, compared with 4.0 per cent and 17 per cent respectively in 2009 (Vinck *et al.*, 2009). Therefore, this improvement reflected a general trend towards food security and reduced malnutrition levels, suggesting that

interventions (including one cow per family) in Rwanda provided some buffer against food price increases for households.

5.2.1.5 Changes in hunger and poverty levels in Uganda

In Uganda, the proportion of the population below the national poverty line declined from 56 per cent in 1992/93 to 31 per cent in 2005/06, and again from 29 to 26 per cent between 2007 and 2009 (Table 5.5). This finding suggests a three per cent decline in poverty levels. Similarly, the United Nations (2010b) and United Nations (2011) report a decline of 6.6 per cent in poverty levels between 2005 and 2009 (Table 5.4). However, these findings are in contrast with the finding reported in Uganda's MDG report for 2010, which estimated an increase in poverty of about 2.6 per cent due to high food prices of 2008 (Ministry of Finance, Planning and Economic Development – Uganda, 2010). The use of different data sets may explain the differences in these findings.

The level of malnutrition in Uganda has also reduced. The proportion of underweight children younger than five years of age declined from 26 per cent in 1995 to 16 per cent in 2005/06 and one per cent between 2007 and 2009 (Table 5.5). In the same period, the percentage of underweight children also declined by 2.6 per cent (Table 5.5). However, the MDG report for Uganda for 2010 noted strongly that the national averages conceal great inequalities between different regions of the country. The progress made by Uganda towards MDG one's goal could be attributed to government's efforts to develop policies that are appropriate for vulnerable people, including agricultural input provision for Ugandan women and youth.

5.2.1.6 Synopsis of country responses and their impact

In short, the food price crisis in the study countries focused the attention of governments on the importance of investing in agriculture, the need to increase food production and provide agricultural assistance to producers. High food price crises also revealed the need to improve existing systems of social protection to mitigate the effects on vulnerable groups. Given the fact that the five countries are low income economies, some of the measures adopted to protect food insecure groups and enhance the supply led to a significant increase in government spending. This would inevitably have created budget deficits. However, careful analysis of the actions implemented by study countries during the high food price crisis

indicates that some responses (for example, food-for-work; food rations, stamps and vouchers; release food reserve stocks; and input subsidies) were appropriate or sound for the protection of poor households (Table 5.4). Therefore, it can be concluded that the 2007/08 responses generally provided some buffering for poor households and mitigated against increased food insecurity. While malnutrition remains a serious challenge for the five countries, a reduction in the proportion of malnourished children between 2007 and 2009 has been reported in Ethiopia, Malawi, Rwanda and Uganda. In Kenya, the levels of malnutrition have somewhat remained constant over this period.

5.3 Translation of early action plans into CAADP compacts and CIPs

This section set out to investigate the progression and systematic translation of risk management programmes from the early food crisis response workshop into country compacts and investment plans. This sub-problem demonstrates what countries proposed to implement at the early food price response workshop and country priority options, as indicated in the CAADP compacts and CIPs (Table 5.6 to Table 5.10). Lessons learnt from the early food price response workshop are recorded and discussed in this section.

5.3.1 Translation of early food price actions into Compact and CIP in Ethiopia

At the early food price response workshop (Table 5.6), Ethiopia proposed eight programmes with regard to improving risk management. Of the eight risk management priority actions proposed at the early food price workshop, two were included in the country compact and seven were translated into the CIP. The inclusion of early action programmes in the CIP could be because the government of Ethiopia realised that interventions implemented early in the food price crisis were helpful in protecting the country from food insecurity and, therefore, decided to carry through the similar programmes into the CIP (but now as medium to long-term strategies).

Table 5.6: Ethiopia's programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010

In the early food price workshop	In the compact	In the CIP
Short-term plans		
Enhancing government capacity-procurement, financial management, grain & input marketing	Increase the effectiveness of programming and execution of government efforts as well as delivery of external assistance	Skills development including for government and farmers
Improve feed and fodder supply in pastoral areas		Livestock & pastoral development
Assisting vulnerable farmers through a purchasing power support voucher system & targeted supplementary feeding for the vulnerable)		Invest in productive safety net programmes : including strengthening and improving Disaster Risk Management (DRM) efforts (protect vulnerable households from natural disasters)
Supply small irrigation equipment		Irrigation development
Improve availability of agricultural implements		Improve seed and fertiliser supply for increased production & productivity
Empower farmers' & consumers' organisations to access capital and training		Access to agricultural credit
	Institutionalise CAADP into the national systems and monitor its implementation in Ethiopia.	Facilitation of peer learning to reap the benefit of the past investments and practices
Medium-term plans		
Strengthen collection and dissemination of data on vulnerability through capacity building and refining content, timeliness	Develop existing and new analyses and knowledge support systems to facilitate peer review, dialogue and evidence-based planning, and implementation of agriculture sector policies and strategies	Improving technology generation and dissemination, including institutionalising research and extension linkages at a decentralised level, improving research priority setting
		Soil fertility management
		Private sector support
	Align the major programmes and policies with CAADP	
		Cooperative development
Improve food quality through processing & value addition		
Long-term plans		
	Strengthen human resources capacity and its effective utilization	
	Promote sustainable natural resource management	Natural resource development
		Market system and infrastructure development

Source: Author's analysis from Ethiopia's CAADP compact - 2009, Ethiopia's CIP - 2010 and AU/NEPAD (2009d and 2008b) high food price reports.

Of the six programmes outlined in the compact, four were included in the CIP, suggesting that the Ethiopia CAADP team seriously considered the programmes indicated in the

compact when their CIP was developed. Only two action plans indicated in the early food price workshop was systematically included in both the CAADP compact and CIP (that is, appeared in all three stages). Programmes in the CIP were also elaborate and comprehensive compared with programmes in the early food price workshop. This is because when the CIP was developed, the country had the FAFS which guided their planning and development of programmes. Wide engagement over the draft CIP by Pillar experts through the CAADP technical review of the investment plan helped refine the FAFS elements of the Ethiopian CIP.

5.3.2 Translation of early food price actions into Compact and CIP in Kenya

In Kenya, eight priority programmes were proposed at the early food price response workshop with respect to risk management (Table 5.7). Of the eight programmes proposed, two were reflected in the CAADP compact. Three programmes from the early food price workshop were also included in the CIP. Therefore, very few programmes in the early food price actions were translated into the CAADP compact and CIP. Only two programmes were included in all three stages (that is, in the early food price plans, CAADP compact and CIP).

Five priority programmes were proposed in the CAADP compact. Of the five priority programmes included in the CAADP compact, four were reflected in the CIP, suggesting that when the Kenyan CAADP team was developing the CIP, priority programmes reflected in CAADP compact were considered rather than in the early food price action plans. Therefore, the influence (observed through content analysis and thematic analysis) of the early food price response workshop on the development of Kenyan CIP was stronger than on the composition of programmes in the CAADP compact. Unlike other programmes that were developed as a direct short-term response to the food price crisis (some of which were converted into the CAADP compact and CIP), the programmes proposed in the CIP were much more elaborate and comprehensive than the early food price workshop plans and the CAADP compact.

Table 5.7: Kenya’s programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010

In the early food price workshop	In the compact	In the CIP
Short-term plans		
Targeted input support for seed, fertilizer & livestock	Increasing productivity and promoting commercialisation and competitiveness of all crops, livestock, marine and fisheries, & forestry	Increase productivity, commercialisation & competitiveness
	Increase market access through the development of cooperatives and agribusiness	
Dissemination of under-utilised technologies		Improve irrigation and water harvest technologies
Mainstreaming risk management		
Safety net programmes – orphan crop programme, livestock safety net programmes, ALLPRO livelihood support project		
Strategic grain reserve		
Medium-term plans		
Strengthen agriculture information systems, capacity building		
Water harvesting, soil & water management	Develop and manage national water resources, land resources, forestry and wildlife, in a sustainable manner	Promote sustainable land and natural resource management
	Promote private sector participation in all aspects of agricultural development	Promote private sector investment and participation in all aspects of agricultural development -research
Development of a centre of excellence in food security		
		Ensuring effective coordination and implementation of the investment strategies
Long-term plans		
	Reforming agricultural service, credit, regulatory, processing and manufacturing institutions for efficiency & effectiveness	Reforming agricultural service, credit, regulatory, processing and manufacturing institutions for efficiency & effectiveness

Source: Author’s analysis from Kenya’s CAADP compact - 2010, Kenya’s CIP - 2010 and AU/NEPAD (2009d and 2008b) high food price reports.

Similarities and improvements (in terms of medium to long-term development plans) observed in the programmes proposed during the CAADP compact and CIP, suggest that Kenya engaged with the FAFS document and that FAFS’s influence on the CAADP compact and CIP shaped the plans to include medium- to long-term plans. Extensive engagement over the draft CIP by Pillar experts, through the CAADP technical review of the investment plan,

also helped refine the Pillar III elements of the Kenyan CIP. The action plans indicated in the CAADP compact and CIP are largely medium- to long-term plans, compared with the shorter-term interventions proposed at the early food price workshop in May 2008. However, omission of interventions, like provision of safety net programmes to farmers, could hinder the success of the plans because poor farmers may not be able to afford the high costs of agricultural inputs.

5.3.3 Translation of early food price actions into Compact and CIP in Malawi

Malawi proposed 10 action plans at the food price response workshop for mitigating high food prices. Of the 10 risks management-related programmes indicated at the early food price workshop, only three priority programmes were included in the CAADP compact and four interventions were translated into the CIP (Table 5.8). Three of the 10 programmes in the early food price workshop were also included in both the CAADP compact and CIP. All priority programmes proposed in the CAADP compact were also included in the CIP (Table 5.8). Malawi's CIPs are largely medium-term.

Generally, interventions in the Malawi CIP are agriculture-oriented. Safety net programmes are completely missing in the Malawi CIP. However, at the early food price workshop, Malawi proposed to expand direct cash transfers to the vulnerable and to strengthen their input subsidy programme. It is not known why Malawi did not include these programmes in their CIP - especially the input subsidy programme that has been reported to have assisted the country in mitigating the high food price crisis impact. However, it is reported that the Malawi maize and fertiliser subsidy programme has been the centre of much international discussion and research and is highly criticised as being used as a tool for political manipulation (Dorward *et al.*, 2008a; Dorward *et al.*, 2010). The level of corruption in an international subsidies programme is a cause for concern for donors (Dorward *et al.*, 2010:17). The wisdom of subsidising a programme in a non-liberalised economy has also been questioned. It is likely that the input subsidy programme was omitted from the CIP for political reasons and because of international pressure (Dorward *et al.*, 2008b; Dorward *et al.*, 2010). Nevertheless, these input subsidies have been reported to have stimulated the production of staple food crops and reduced vulnerability among low income populations in Malawi. Chirwa and Dorward (2012); Dorward and Chirwa (2011) confirmed that the nationwide disbursement of heavily subsidised fertilisers and seeds to large numbers of beneficiaries represents a considerable logistical achievement and substantially increased

national maize production and productivity, contributing to increased food availability, higher real wages, wider economic growth and poverty reduction.

Table 5.8: Malawi’s programmes indicated in the early food price response workshop, CAADP compact and CIPs, 2010

In the early food price response workshop	In the compact	In the CIP
Short-term plans		
Strengthen capacity of national vulnerability assessment through agricultural information system		Improve the Malawi Vulnerability and Assessment Committee assessments to effectively identify pockets of food insecurities and vulnerabilities
Increase direct transfers to the vulnerable – cash & food		
Strengthen input subsidy programme		
Restock Strategic Grain Reserve		
Improve nutritional status of the vulnerable		
Medium-term plans		
	Enhance commercial agriculture, agro-processing and market development	Enhance commercial agriculture, agro-processing and market development
Enhance capacity to implement market-based risk management instruments	Improve food security and risk management	Improve food security and risk management
Irrigation & water harvesting technologies	Enhance sustainable agricultural land and water management	Enhance sustainable agricultural land and water management
Enhance capacity of small scale farmers and institutions	Institutional strengthening and capacity building	Institutional strengthening and capacity building
	Improve technology generation and dissemination	Improve technology generation and dissemination
Intensify conservation agriculture & integral soil fertility management		
Increase fish production		
Long-term plans		
		Improve the monitoring and surveillance systems that are critical to the country’s ability to target programming and maintain adequate preparedness for potential food security crises

Source: Author’s analysis from Malawi’s CAADP compact - 2010, Malawi’s CIP - 2010 and AU/NEPAD (2009d and 2008b) high food price reports.

5.3.4 Translation of early food price actions into Compact and CIP in Rwanda

In Rwanda, nine priority programmes were proposed at the early food price workshop, four programmes in the CAADP compact and six programmes in the CIP (Table 5.9). Four of the nine risk management-related programmes from the early food price workshop were

translated into the CIP (Table 5.9), while only two programmes from the early food price responses appears in the country compact. Considering that Rwanda was the first country to sign a compact (in 2007 – ahead of the high food price crisis), it is not surprising that there is little correlation between the early response plans and the CAADP Compact. The Rwandan CIP was under development during the food price crisis and was released in late 2009. As a result, the programmes in the CIP were more coherent and comprehensive than their early food price response plans. Most programmes in the Rwanda CIP are medium- to long-term development plans. This is to be expected as the CIPs are medium-term investment plans, but the inclusion of long-term plans should ensure a more food-secure future.

Table 5.9: Rwanda’s programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010

In the early food price workshop	In the compact	In the CIP
Short-term plan		
Strengthen safety net programme (one cow per poor family)		
Strengthen market information system		
Special credit for agricultural inputs		Strengthening rural financial system
Land husbandry, water harvesting and hillside irrigation project		
Facilitate cooperative and private sector access to agriculture guarantee facility		
Communication through national and private radio stations		
Medium-term plan		
Cooperative development, storage and treatment, value addition and marketing		Production and value-addition for domestic staple products
Help consumer cooperatives to own shops	Support of professionalisation of producers	Support of professionalisation of producers
	Promotion of commodity chains and development of agri-business	Promotion of commodity chains and development of agri-business
	Intensification and development of sustainable production systems	Intensification and development of sustainable production systems
Long-term plans		
Capacity building	Institutional development	Institutional development

Source: Author’s analysis from Rwanda’s CAADP compact - 2007, Rwanda’s CIP - 2009 and AU/NEPAD (2009d and 2008b) high food price reports.

5.3.5 Translation of early food price actions into Compact and CIP in Uganda

Uganda proposed 14 priority programmes at the early food price response workshop in May 2008 (Table 5.10). Of the thirteen programmes, three were included in the CAADP compact. Six priority programmes were translated into the CIP. All priority programmes proposed in the CAADP compact were included in the CIP. The inclusion of all priority programmes from the CAADP compact into the CIP could be because both were being drafted simultaneously (the compact and CIP were completed in March 2010 and June 2010 respectively) in an attempt to beat the deadline for submission of proposals to the Global Agriculture and Food Security Programme (GAFSP) Multi Donor Trust Fund.

Table 5.10 shows that priority programmes in the CAADP compact and CIP are more detailed and comprehensive in terms of addressing food security issues than the programmes proposed in the early food price response workshop. Improvements in the programmes could be as a result of the fact that Uganda had two years, from the early food price response workshop and the signing of the CAADP compact and CIP, to plan their programmes before signing the CAADP compact. Therefore, the country had time to engage stakeholders and develop a medium-to long-term development plan.

Uganda's compact and CIP omitted some important risk management programmes that were proposed in the early food price response workshop, such as the programme to vaccinate poultry and ruminants against diseases and training of farmers in production, storage and post-harvest losses. Vaccination against poultry and ruminants' diseases is important because poultry and livestock diseases are a threat to small-scale farmers and, therefore, actions to mitigate these diseases would support farmers and increase production. The training of farmers in production chain (including post-harvest losses), and not just strengthening capacities as indicated in CIP, would also have been an important programme to include in a medium- to long-term food security strategy because post-harvest losses in Uganda (and Africa in general) are significant. For example, Rembold *et al.* (2011) estimated post-harvest losses in Uganda to be as follows: cereals - 20 per cent; pulses and oilseeds – 30 per cent; and roots and tubers – 40 per cent in 2008.

Table 5.10: Uganda’s programmes indicated in the early food price response workshop, CAADP compact and CIP, 2010

In the early food price response workshop	In the compact	In the CIP
Short-term plans		
Free seed, fertilizer & agro-chemicals to vulnerable groups	Enhance sustainable production and productivity	Enhance production and productivity
Input provision to women and youth farmers; promote diversification of production		Increase rural incomes and livelihoods through strategic enterprises
Increase vaccination against poultry diseases and small ruminants		
Develop financial products through Uganda Development Bank	Create an enabling environment for development	Create an environment for development
Medium-term plans		
Develop rural market infrastructure	Improve access to markets and value addition	Improve access to markets and value addition
By-laws in local government for production and storage of food security commodities		
Support private sector food importation, establish credit scheme to support private sector export		Expand the private sector
Training for production and storage, capacity building		Public education programmes for agriculture
Identify labour-saving technologies for women		
Explore establishment of national food reserve for maize and beans at regional level		
Establish functioning market information system		
Develop soil & water conservation		
Improve market research and analysis		
Long-term plans		
Strengthen capacities	Strengthen sector institutions and provision of academic training in agriculture	Strengthen monitoring and evaluation systems
		Institutional strengthening in the sector
		Establish clear policy frameworks

Source: Author’s analysis from Uganda’s CAADP compact - 2010, Uganda’s CIP - 2010 and AU/NEPAD (2009d and 2008b) high food price reports.*represent sub-problems included and that relate to CAADP pillar III.

5.3.6 Synopsis of the translation of early actions into CAADP compacts and CIPs

Although the May 2008 workshop did not intend to assist countries with the development of comprehensive national investment plans, but rather to assist them in identifying responses to mitigate the crisis, the workshop seems to have influenced the development of programmes in the CAADP compacts and CIPs with regard to long-term food security strategies. This is

evident from the analysis of the compacts and CIPs, except in the Rwandan compact, which was signed before the food price crisis emerged. Except for Uganda, elements of most of the early response plans are evident in the CAADP compacts and CIPs. The CAADP FAFS influence on the CIPs is also evident, demonstrating that the workshop was a useful platform for introducing the CAADP FAFS.

Improvements (in term of moving from short-term to long-term development programmes) in the CAADP compacts and CIPs were expected for three reasons. First, in developing the CAADP compacts and CIPs, countries were guided by the CAADP FAFS, which was first presented at the food price response workshop. Second, the final country CAADP compacts and CIPs undergo extensive stakeholder engagement by CAADP FAFS experts through the CAADP technical reviews meetings which help to refine FAFS elements of the CIPs. All processes (stakeholder engagements and adaptation of programmes) involved in the development of CIPs are guided by evidence-based analysis. Third, the country CAADP process as a whole, including the involvement of CAADP experts and country teams, ensures that the final CIP addresses FAFS elements. The CAADP country process leads to better policies, capacities and investment programmes. Therefore, programmes in the CIPs were more comprehensive than early food price response plans.

5.4 Country investment plans and inclusion of risk management strategies

This section sets out to investigate if CIPs included effective ways of mitigating risk should the crisis persist or future crises arise. The effectiveness of the risk mitigation is assessed against a check-list of essential elements for risk management as set out in the CAADP FAFS. The discussions in this section also take into account the CAADP FAFS's other three elements, including: increased food supply through improved production and market linkages; increased economic opportunities for the vulnerable; increased quality of diets through diversification of food, and the inter-linkages between them. Therefore, the CAADP FAFS is used as a tool or criterion, to determine whether CIPs contribute or focus on FAFS element(s) or not, as is the practice in the CAADP technical reviews of the CIPs.

CIPs were classified according to their contribution to FAFS's elements to determine whether these elements had been included in the CIPs. Firstly, the classification of CIPs into FAFS's elements was done by the University of Pretoria's collaborative masters students who did the CIPs classification exercise as part of their class work. Secondly, the author cross-checked

this classification against FAFS recommended programmes for each of the FAFS elements. The proportional contribution of CIPs to each of the FAFS elements was then calculated (Appendix G) and presented in Tables 5.11 to 5.15 of this sub-problem.

Risk management programmes were further classified, analysed and grouped into three elements or options for improving risk management, as set out in the CAADP FAFS, to ascertain whether risk management strategies were comprehensive or not. These elements or options for improving risk management are explained in detail in Appendix H and they include:

- Improving early warning systems and crisis prevention
- Improving emergency responses
- Strengthening risk management policies and institutions.

The risk management strategies set out in the CIP reinforce the principles of all the CAADP Pillar Frameworks and support the development strategies of the country.

5.4.1 Inclusion of risk management strategies in the Ethiopia CIP

Ethiopia proposed 13 programmes in their CIP (Table 5.11). Of the 13 programmes in the CIP, all seek to improve risk management. Seven of the eight programmes seek to increase the supply of affordable food. Eleven programmes in the CIP were focused on increasing economic opportunities for the vulnerable. Only two of the 13 programmes in the Ethiopian CIP aim to increase dietary quality (Table 5.11).

In terms of the risk management strategies proposed in the CIP, eight of the 13 strategies are likely to improve early warning systems and crisis prevention. Four of 13 risk management strategies from the CIP should improve emergency responses. Only one of the nine risk management priority programmes in the CIP seeks to strengthen the risk management policies and institutions. Therefore, risk management in the CIP largely focused on risk management options regarding improvement of early warning systems and crisis prevention, but ignored options for improving emergency responses. Risk management strategies in the CIP also ignored options for strengthening risk management policies and institutions.

Table 5.11: Ethiopia CIP's contribution to FAFS elements, 2011

Programme	Does this intervention or programme:			
	Improve risk management?	Increase supply of affordable food?	Increase economic opportunities?	Increase quality of diets?
Skills or capacity development including for government and farmers	✓	✓	✓	x
Invest in livestock & pastoral development	✓	x	✓	✓
Invest in irrigation development	✓	✓	✓	x
Invest in productive safety net programmes	✓	x	✓	✓
Improve seed & fertiliser supply for increased production and productivity	✓	✓	✓	x
Create or improve access to agricultural credit	✓	✓	✓	x
Facilitation of peer learning to reap the benefit of the past investments and practices	✓	✓	✓	x
Soil fertility management	✓	x	X	x
Private sector support	✓	x	✓	x
Improving technology generation and dissemination, including institutionalizing research and extension linkages at a decentralised level	✓	✓	✓	x
Cooperative development	✓	✓	✓	x
Natural resource development	✓	x	✓	x
Market system infrastructure development	✓	✓	✓	x
Total number of programmes	13	8	11	2
Proportional (%) contribution of CIP to FAFS's element(s)				
Programme contribution to FAFS element(s) (%)	100	62	85	15

✓ denotes a positive contribution of a programme towards CAADP FAFS's element(s).

X denotes that a programme has no contribution towards a CAADP FAFS's element(s).

Source: Author's analysis from Ethiopia's CAADP compact - 2009, Ethiopia's CIP - 2010 and AU/NEPAD (2008b and 2009d) high food price reports.

Although Ethiopia's proposed programmes generally address risk mitigation and cover the risk management options as set in the CAADP FAFS, there is a concern over omission of a medium- to long-term disaster risk management strategy framework. On a positive note, many programmes address more than one of the four CAADP FAFS elements deemed necessary to address food insecurity in Africa in a comprehensive way. In terms of supply of affordable food for the vulnerable, there are plans to increase the supply of affordable foods through investing in agricultural sector productivity and production, improving agricultural research and extension services, market system infrastructure development, cooperative development and stabilise food security. The inclusion of programmes like expanding the public infrastructure and investing in irrigation development systems would increase economic opportunities for the vulnerable through creation of jobs.

Given the malnutrition levels in Ethiopia (36 and 37 per cent prevalence of child (percentage of under 5) malnutrition and adult malnutrition respectively), Ethiopia needs to include more nutrition programmes to reduce the high levels of malnutrition and poverty in the country. Other programmes (including capacitating farmers to increase production and productivity and natural resource development) in the Ethiopian CIP could contribute to improving the quality of diets provided that food production will be diversified in terms production and consumption. The CIP did not explain whether increasing production would involve diversification of food production and consumption or will merely involve the increased production of the single main staple food. It is, therefore, not easy to conclude whether the programme will contribute to the quality of diets. However, livestock production would increase the quality of diets in the country. As confirmed in the CAADP technical review for Ethiopia (2010), livestock and pastoral systems make significant contributions to the Ethiopian economy (livestock contributes an estimated 16 per cent of total GDP and over 40 per cent to the agricultural GDP). This means that sustained agricultural growth depends on expanding the role and contribution of livestock to the economy. Therefore, inclusion of livestock was an appropriate decision by the government of Ethiopia and livestock helps to improve risk management.

While the Ethiopian investment plan states that nutrition programmes will be integrated into the Policy Investment Framework (PIF) implementation, it is not clear how this will be accomplished. This is an important omission as achieving the CAADP and MGD goals requires significant investment in nutrition as part of a comprehensive programme. At the

same time, there are numerous options and opportunities for the country to include nutrition elements in the CIP programmes. Food security and nutrition efforts could be linked into the Productive Safety Net Programmes (PSNP) through supplementation of food to accelerate the impact on poverty and hunger reduction. This can be done in ways that are completely consistent with the country's current planning and FAFS recommendations for improving the quality of diets through diversification of food consumption. The CAADP FAFS endorses social protection programmes as critical components of effective food security architecture in Africa, and recognises that there is a role for cash transfers in the management of emergencies, where market access exists (AU/NEPAD, 2009a).

5.4.2 Inclusion of risk management strategies in the Kenya CIP

Kenya proposed six programmes in their CIP (Table 5.12). Their investment plan clearly recognises the need to mitigate risks to ensure food security and acknowledges that its different agro-ecological zones face a variety of food security challenges. All six programmes in Kenya's CIP include risk management strategies. Five of the six programmes are likely to increase the availability of affordable food, three could increase access to economic opportunities for the poor, while only one programme focus on improving dietary quality through diversification of production and consumption.

With regard to the risk management strategies outlined in the CIP, only one of six risk management strategies is likely to improve early warning systems and crisis prevention. Four of the six strategies from the CIP should improve emergency responses. Only one of nine risk management priority programme in the CIP seeks to strengthen the risk management policies and institutions. Therefore, the risk management strategies in the CIP are not comprehensively addressing the elements of risk management as they are focused extensively on improving emergency responses, but ignored options for improving early warning systems and crisis preventions. Of all the study countries, Kenya is the only country that did not focus mainly on improving early warning systems and crisis prevention. The strategies in Kenya's CIP also ignored options for strengthening risk management policies and institutions as set out in the FAFS.

Table 5.12: Kenya CIP's contribution to FAFS elements, 2011

Programme	Does this intervention or programme			
	Improve risk management?	Increase supply of affordable food?	Increase economic opportunities?	Increase quality of diets?
Increase market access and trade through development of cooperatives and agri-business	✓	✓	✓	x
Increase productivity, commercialisation and competitiveness	✓	✓	✓	✓
Ensure effective coordination and implementation of investment strategies	✓	x	X	x
Promote private sector participation	✓	✓	X	x
Promote sustainable land and natural resource management	✓	✓	✓	x
Reform agricultural service, credit, regulatory, processing and manufacturing institutions for efficiency & effectiveness	✓	✓	X	x
Total number of programmes	6	5	3	1
Proportional (%) contribution of CIP to FAFS's element(s)				
Programme contribution to FAFS element(s) (%)	100	83	50	17

✓ denotes a positive contribution of a policy option towards CAADP FAFS's element(s)

X denotes that a programme has no contribution towards a CAADP FAFS's element(s)

Source: Author's analysis from Kenya's CAADP compact - 2010, Kenya's CIP - 2010 and AU/NEPAD (2008b and 2009d) high food price reports.

It is noted from Kenya's Medium Term Investment Plan (MTIP) and the Agriculture Sector Development Strategy (ASDS) that the role of food security and nutrition interventions is recognised. However, there are no clear plans for implementation of nutrition programmes and no clear strategy to include nutrition programmes in the CIP. The lack of integration of nutrition plans shows a disjuncture between the sector-specific programmes and the CIP, which is meant to bring together all existing programmes in a comprehensive approach.

Kenya omitted some of the important programmes that were proposed at the early food crisis responses workshop from the country CIP. For example, at the early food price responses workshop, Kenya proposed the strengthening of social protection programmes and agriculture information systems. These interventions might have been removed because, according to a number of reports, they are costly. The absence of these two programmes from

the country investment plan is disappointing because with social protection programmes Kenya could improve the quality of diets.

In sum, an analysis of the programmes show that Kenya's plans focus narrowly on the agriculture element and ignore the important elements of ensuring food security for all citizens. Although Kenya has a nutrition strategy, elements of nutrition and food security were not included, and so the CIP is not as comprehensive as expected from the CAADP programme.

5.4.3 Inclusion of risk management strategies in the Malawi CIP

In Malawi, seven priority programmes were proposed in the CIP (Table 5.13). All seven programmes included risk management strategies (Table 5.13). Of the seven priority programmes, five programmes are likely to increase the supply of affordable food. Four seek to increase economic opportunities for the vulnerable groups, and only two programmes focus on increasing the quality of diets through diversification of food.

In terms of the risk management strategies proposed in the CIP, five of the seven strategies could improve early warning systems and crisis prevention. Two of the seven risk management strategies are likely to improve emergency responses. Not one of the seven risk management priority programmes in the CIP focuses on strengthening risk management policies and institutions in the Malawian CIP. Although risk management strategies are included in the CIP, these strategies would not address risks comprehensively. This is because the CIP largely focused on improving early warning systems and crisis prevention, but ignored risk management strategies for improving emergency responses and strengthening risk management policies and institutions.

A unique element of the Malawi CIP is the provision to improve the country's Vulnerability and Assessment Committee's (MVAC) monitoring and surveillance systems to effectively identify food insecure communities and vulnerable groups and improve the country's ability to target programming and ensure preparedness for a potential food security crisis. Vulnerability assessment is crucial because it informs on the state of food insecurity in the country and informs on the level of preparedness, should a crisis strike the country. A programme for capacity development and training is included. Effective integration of

disaster risk management strategies into sustainable development policies, planning and programming at all levels would be important for the government. The special emphasis on disaster prevention, mitigation and preparedness, and vulnerability reduction is crucial for government (AU/NEPAD, 2009a).

Table 5.13: Malawi CIP's contribution to FAFS elements, 2011

Programme	Does this intervention or programme:			
	Improve risk management?	Increase supply of affordable food?	Increase economic opportunities?	Increase quality of diets?
Enhance commercial agriculture, agro-processing and market development	✓	✓	✓	✓
Improve the Malawi Vulnerability and Assessment Committee assessments to effectively identify pockets of food insecurities and vulnerabilities	✓	x	x	x
Improve food security and risk management	✓	✓	✓	✓
Institutional technology and capacity building	✓	✓	✓	x
Enhance sustainable agricultural land and water management	✓	✓	x	x
Improve technology generation and dissemination	✓	✓	✓	x
Improve the monitoring and surveillance systems critical to the country's ability to target programming and maintain preparedness for potential food security crises	✓	x	x	x
Total number of programmes	7	5	4	2
Proportional (%) contribution of CIP to FAFS's element(s)				
Programme contribution to FAFS element(s) (%)	100	71	57	29

✓ denotes a positive contribution of a policy option towards CAADP FAFS's element(s)

X denotes that a programme has no contribution towards a CAADP FAFS's element(s)

Source: Author's analysis from Malawi's CAADP compact - 2010, Malawi's CIP - 2010 and AU/NEPAD (2008b and 2009d) high food price reports.

To reduce food security risks, the Malawi CIP emphasises the need for provision of drought resistant and early maturing varieties of maize and inputs to boost diversified agricultural

production and productivity. While the Malawi CIP is elaborate regarding the strategies needed to reduce risks at national level, the profiling of vulnerable groups is missing in the plan. This makes it difficult to identify the level and scope of action required to address the risks to food and nutrition insecurity of vulnerable groups.

The inclusion of a plan to strengthen the systems and the capacity to improve them is commendable. Many CAADP reviews identify this aspect as a mission element, but the Malawian government included it as a strategic element in their CIP. The Malawian government has committed itself, through the CIP, to promote innovative market-based risk management schemes. These include:

- Crop weather-related insurance products
- A warehouse receipt system operated by the private sector
- Community market insurance system
- Improving the weather forecast systems for rainfall.

5.4.4 Inclusion of risk management strategies in the Rwandan CIP

Despite recent production increases in Rwanda, households remain vulnerable to weather-related and external shocks, as well as chronic malnutrition (CAADP technical review – Rwanda, 2009). The Rwandan CIP is comprehensive in terms of risk management - all six priority programmes in the CIP could improve risk management (Table 5.14). All six programmes also aim to increase the supply of affordable food. Another six programmes also seek to offer economic opportunities for those vulnerable to food insecurity. Three of the six programmes proposed in the CIP are likely to increase dietary diversity through diversification of food production and consumption.

Regarding the risk management strategies proposed in the CIP, four of the six strategies are likely to improve early warning systems and crisis prevention. One of the six focused on improving emergency responses. Another seeks to strengthen the risk management policies and institutions. Risk management in the CIP largely focused on risk management options that improve early warning systems and crisis prevention, but ignored options for improving emergency responses. Risk management strategies in the CIP also ignore options for strengthening risk management policies and institutions. Therefore, although the CIP included risk management strategies, these strategies would not address risks in a

comprehensive manner as they do not focus on all risk management elements as they are set out in the FAFS.

Of the five study countries, Rwanda is the only country where most priorities in the CIP should increase dietary diversification; three of the six priority programmes are aimed directly at improving the quality of diets through diversification of food production and consumption (Table 5.14). Although, as in the other four country CIPs, specific food security strategies are not outlined, a number of projects and action plans could indirectly address food security and improve risk management. These include: programmes to encourage or intensify diversification of food sources (through increasing ownership of livestock and crops); increasing the consumption of high protein animal products; establishing national food security nutrition monitoring systems; and improving food storage systems.

Table 5.14: Rwanda CIP's contribution to FAFS elements, 2011

Programme	Does this intervention or programme:			
	Improve risk management?	Increase supply of affordable food?	Increase economic opportunities?	Increase quality of diets?
Intensification of sustainable diversified production systems	✓	✓	✓	✓
Support of professionalisation of producers	✓	✓	✓	x
Production of value-addition for domestic products	✓	✓	✓	✓
Promotion of commodity chains and development of agri-business	✓	✓	✓	✓
Strengthen the access to financial services including for rural people	✓	✓	✓	x
Institutional development	✓	✓	✓	x
Total number of programmes	6	6	6	3
Proportional (%) contribution of CIP to FAFS's element(s)				
Programme contribution to FAFS element(s) (%)	100	100	100	50

✓ denotes a positive contribution of a policy option towards CAADP FAFS's element(s)

X denotes that a programme has no contribution towards a CAADP FAFS's element(s)

Source: Author's analysis from Rwanda's compact - 2007, Rwanda's CIP - 2009 and AU/NEPAD (2008b and 2009d) high food price reports.

The 'one cow per poor family' programme has had a positive impact in Rwanda, improving the nutrition and poverty status of beneficiaries (Nierenberg, 2010). The programme

encourages livelihood diversification for poor households in the country and improves household resilience. Four priority programmes included in the CIP, which were not part of the early response plan, are the intensification of sustainable diversified production systems, promotion of commodity chains and development of agri-business, support of the professionalisation of producers and the institutional development. However, Rwanda omitted some of the priorities proposed at the early food price response workshop from their CIP, including facilitation of cooperative and private sector access to an agriculture guarantee facility.

5.4.5 Inclusion of risk management strategies in the Uganda CIP

Uganda proposed nine priority programmes in their CIP (Table 5.15). Of the nine programmes, all included risk management strategies. Eight of the nine programmes could potentially increase the supply of affordable food and all the CIP programmes are likely to increase the economic opportunities available to those vulnerable to hunger and poverty (Table 5.15). Two of nine programmes aim to improve the quality of diets through diversification of food consumption and production (Table 5.15).

In terms of the risk management strategies proposed in the CIP, four of the nine strategies would improve early warning systems and crisis prevention. Another four of nine strategies are likely to improve emergency responses. One of the nine programmes focuses on strengthening risk management policies and institutions. All Uganda's priority programmes included risk management strategies and the strategies would address risks, but not comprehensively. This is because the CIP focused on options for improving early warning systems, crisis prevention and improving emergency responses, but ignored options for strengthening risk management policies and institutions as set out in the FAFS. While did focus on two elements of risk management (improve early warning systems and crisis prevention) but the country failed to also focus on strengthening risk management policies and institutions as it is part of the risk management elements set out in the FAFS document.

Table 5.15: Uganda CIP's contribution to FAFS elements, 2011

Programme	Does this intervention or programme:			
	Improve risk management?	Increase supply of affordable food?	Increase economic opportunities?	Increase quality of diets?
Enhance production and productivity	✓	✓	✓	x
Increase rural incomes and livelihoods	✓	✓	✓	✓
Create an enabling environment for development	✓	x	✓	x
Improve access to markets and value addition	✓	✓	✓	✓
Expand the private sector	✓	✓	✓	x
Strengthen monitoring and evaluation systems	✓	✓	✓	x
Institutional strengthening in the sector	✓	✓	✓	x
Strengthen capacities	✓	✓	✓	x
Establish clear policy frameworks	✓	✓	✓	x
Total number of programmes	9	8	9	2
Proportional (%) contribution of CIP to FAFS's element(s)				
Programme contribution to FAFS element(s) (%)	100	89	100	22

✓ denotes a positive contribution of a policy option towards CAADP FAFS's element(s)

X denotes that a programme has no contribution towards a CAADP FAFS's element(s)

Source: Author's analysis from Uganda's compact - 2010, Uganda's CIP - 2010 and AU/NEPAD (2008b and 2009d) high food price reports.

Seven programmes that were prioritised at the early food price response workshop were omitted from the CIP. This is worth noting because the action plans omitted from the CIP could be important in improving risk management. Programmes for: vaccination of poultry and ruminants; training of smallholder farmers for crop and animal production and storage of crops; establishment of national food (maize and bean) reserves; establishment of a functioning market information system; and improvement of market research could improve risk management and the quality of diets (production of crops and animals) in Uganda.

While the proposed Uganda investment programmes do aim to improve risk management - most priorities identified in the CIP address the CAADP FAFS elements of improving the supply of affordable food and increasing employment opportunities for those vulnerable to poverty and hunger - inadequate attention is paid to improving diet quality. This is a significant omission as the prevalence of child (children under 5) malnutrition in Uganda was reported to be 16 per cent in 2006 (United Nations, 2010b).

5.4.6 Synopsis of inclusion of risk management strategies in the CIPs

In general, the five CIPs included risk management strategies, but these were not addressed in a comprehensive manner. The lack of programmes focused on improving dietary quality is a cause for concern. The CIPs for Ethiopia, Kenya, Malawi and Uganda have only one or two programme(s) in each country that could improve nutrition. These programmes include:

- Investing in livestock, pastoral development and productive safety nets in Ethiopia
- Increasing productivity of diverse crops in Kenya
- Improving food security and enhancing agricultural production for consumption and agro-processing for market development in Malawi
- Increasing rural incomes and livelihoods and increasing access to markets and value addition in Uganda.

As CIPs were developed under FAFS as a resource for food security programmes, it was expected that all CAADP countries would consider the FAFS options for reducing hunger and improving dietary quality through diversification of food. Therefore, countries should have drawn nutrition programmes from the FAFS. These nutrition-related programmes include, but are not limited to:

- Options for improving food access (social protection programmes, school feeding programmes and investment to improve market infrastructure in staple food value chains)
- Options for improving food utilisation (micronutrient supplementation, food fortification, rationalisation of food price policies to improve incentives for production, processing and marketing of food favoured by vulnerable populations)
- Options for improving dietary quality (community or home vegetable and fruit gardens, investing in post-harvest losses, improving food safety techniques and implementation of the school-based gardening programmes).

In terms of options for improving risk management, the proposed CIPs generally focused on improving early warning systems and crisis prevention, but ignored the improvement of emergency responses and mostly the strengthening of risk management policies and institutions. It is clear from all countries that options for strengthening risk management policies and institutions were given minimal attention when CIPs were developed. This means that focus on the development of policies and institutions for improved management of food surpluses, and formulation of improved risk management policies, including proactive review and use of alternative instruments to deal with crises (for example: food and financial reserves, weather-based insurance and futures options) will also be minimal. Therefore, while all study countries have included strategies to improve risks in their CIPs, these strategies would not improve risk management comprehensively. Considering risk management options as set out in the FAFS, there are essential elements for risk management that some countries have not considered. These include:

- A sound monitoring and evaluation plan
- Early warning systems and a vulnerability information system
- Coordination, technical elements and capacities
- Food reserves
- Sound social protection programmes
- Sound contingency plans.

The omission of early warning system-related programmes in Kenya might prevent the countries from measuring, monitoring and tracking groups who are vulnerable to food insecurity and shocks (for example: droughts, floods, markets and other shocks) and mapping these populations for targeting interventions. Early warning systems are a key element in disaster risk management. Therefore, the lack of action plans in Kenya that are focused on early warning and vulnerability information systems might lead to the non-availability of reliable and credible food security information. This food security information is crucial for early warning, responding to crises, making policy decisions and supporting decision making processes.

While the countries' risk management programmes may buffer poor households against high prices and mitigate against risks in general, there is little doubt that countries will continue to

face crises and risks. While the intent of CIPs is good, funding gaps could constrain their implementation (Figure 5.2), leaving countries vulnerable to future food insecurity and price increases.

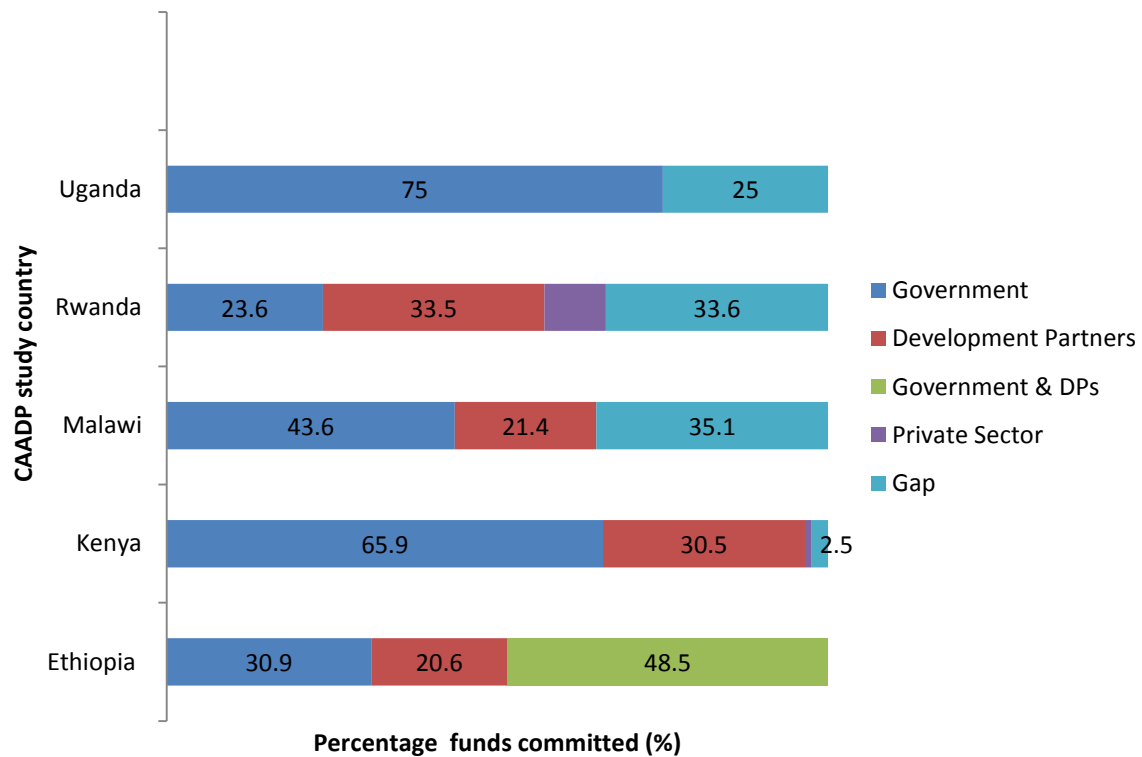


Figure 5.2: Sources of funding for the CIPs (adapted from ReSAKSS, 2010).

The next chapter presents the conclusions and recommendations of the study.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

Following a long-term reduction in the real prices of foods by three quarters between 1974 and 2005, the trend was reversed by sudden global food price increases that began in 2005 and reached a peak in mid-2008. The sharp rise of staple food prices in 2007/2008 led to significantly higher food prices across the developing world, including Africa. Global food prices dropped slightly after July 2008, but local food prices remained high, suggesting a structural upward adjustment in food prices amidst considerable price volatility. The trend of rising food prices was worsened by substantial increases in fuel prices (affecting transport and food production costs as input prices like fertiliser prices also increased) and global economic recession.

Continuous increases in real food prices led to considerable media coverage and further alarm among governments, who implemented various responses to protect their populations against food insecurity. The food price crisis highlighted the need for increased investment in Africa to increase the supply of food, either to take advantage of good market prospects or decrease dependency on food imports and increase self-sufficiency. Therefore, relatively high food prices have provided countries with an opportunity to find long-term solutions to hunger through agriculture-led growth.

Recognising the crisis caused by the high food prices of 2008, the AU/NEPAD invited 16 African countries to the first high food price workshop in Africa on the 20th- 23rd of May, 2008 in Johannesburg, South Africa. The aim of the workshop was to assist selected African countries to identify and formulate appropriate plans to mitigate food insecurity and manage increasing food prices. The introductory plenary session presented the Comprehensive Africa Agriculture Development Programme's Framework for African Food Security (CAADP's FAFS), an introduction on the food crisis, predicted trends for prices and food security, and outlined potential responses to high food prices.

Although 16 African countries were invited to the AU/NEAD high food price workshop, this study focuses on five Anglophone countries (Ethiopia, Kenya, Malawi, Rwanda and Uganda) that participated in the workshop, had signed their CAADP country compact and had elaborated a country investment plan by December 2010. Although Sierra Leone met the criteria, this country was excluded as it was the only West African country. Sierra Leone was

also excluded because the country investment plan (CIP) narrowly focused on rice production, while other countries had a broader focus.

This study investigates whether the strategies implemented by national governments at the start of the crisis mitigated high food prices through improved risk management strategies in five African countries - Ethiopia, Kenya, Malawi, Rwanda and Uganda. It also evaluated if these strategies became part of national agriculture and food security investment plans. The involvement of the researcher in the AU/NEPAD high food price workshop and subsequent engagement in various CAADP processes provided an unique opportunity for this innovative study. The first-hand engagement with representatives of national governments offered an inimitable chance to concurrently observe the unfolding of the food price crisis and the emergence of the CAADP CIPs. This gave rise to the analysis of the iterative process of CIP development. CAADP provides an interactive learning process comprising analysis, design, implementation and evaluation of agricultural programmes. The country implementation process seeks to improve the quality and effectiveness of agricultural sector programmes through integrating the principles and values of CAADP into the national systems of development planning and implementation.

This comparative narrative study was conducted between May 2008 and December 2011. It is innovative in that it integrates qualitative, content and thematic analysis. The methodology applied is largely qualitative, except where secondary data regarding price trends were analysed. The application of both qualitative and quantitative analysis (where both are used) provides a comprehensive picture of the impact of high food prices and national food security in these five countries. The four elements of the FAFS provided a natural choice or lens for analysis. The use of CAADP FAFS elements as a framework of analysis added to the uniqueness of the study. No published research is available that compares national CIPs or evaluates their effectiveness regarding the ongoing high food prices.

In this study, the impact of high food prices is evaluated by comparative, content and trends analysis using a narrative approach. Government policy responses are analysed through FAFS, content and comparative analysis, while the effectiveness of the policy responses is evaluated through FAFS elements. The progressing translation of action plans was determined through content analysis, thematic analysis and FAFS. CIPs were evaluated by FAFS elements and content analysis.

The high food price situation presented many challenges (among other things, the higher cost of the food basket eroded purchasing power and increased food insecurity) but also created opportunities for African governments and farmers to invest in agricultural growth. As the poor allocate a higher proportion of their income to food, higher food prices could mean that other expenditures on education and health are constrained, reinforcing poverty and food insecurity.

Between March 2007 and March 2008, the percentage change in food prices for Ethiopia and Kenya were more significant (39 and 50 per cent respectively) than Malawi, Rwanda and Uganda, where food price changes were lower than 10 per cent. However, between March and September 2008, Rwanda and Uganda exhibited significant food price changes compared with Ethiopia, Kenya and Malawi, although Ethiopia and Kenya still had the highest food price index (FPI).

The significant changes in food prices suggested a strong link between the global and domestic markets of these countries, while the low increases in FPI meant that there was a weak association between global and domestic markets. There was price transmission from global to local markets, but the impact was not as severe as expected. Poverty and malnutrition dropped marginally – even though reductions may not completely be attributed to the country responses to high food prices.

Export restrictions or bans were popular measures implemented by all five countries as early food crisis responses. Four of the five countries also implemented food price controls and social protection programmes. The social protection programmes included the provision of different packages of support to poor farmers, like producer price supports and subsidies in the case of Kenya, Malawi, Rwanda and Uganda. Ethiopia's social protection programme included cash transfers, food assistance and public works programmes. Kenya, Malawi and Rwanda also implemented cash transfers, food assistance and introduced or scaled up their school feeding programmes. While malnutrition remains a serious challenge for the study countries, a reduction in the proportion of malnourished children between 2007 and 2009 was reported in all countries, except Kenya. In Kenya levels of malnutrition remained constant.

At the early food price workshop, of the eight programmes proposed by Ethiopia, two and three were translated into the compact and CIP respectively. Kenya proposed eight priority programmes at the early food price workshop, but two of those programmes were included in the compact and three programmes were reflected in the CIP. Of the 10 programmes proposed by Malawi at the early food price workshop, three programmes were translated into the compact and four were included in the CIP. Of the nine programmes proposed by Rwanda in the early food price workshop, four programmes translated into the compact and another four were reflected in the CIP. Uganda proposed 13 priority programmes at the early food price workshop, but of these programmes, three were included in the compact and six were translated into the CIP. Generally, the early food price programmes were translated into the compact and CIP, indicating the influence of the early food price responses and FAFS on the development of CAADP food security and nutrition programmes.

Risk management strategies were generally included across countries, but these strategies were not covered comprehensively. Of the 13 risk management strategies proposed in Ethiopia, eight were likely to improve early warning systems and crisis prevention, four were likely to improve emergency responses and only one strategy was focused on strengthening risk management policies and institutions. Only one of the six risk management programmes in Kenya focused on improving early warning systems and crisis prevention, four are likely to improve emergency responses and one programme focused on strengthening risk management policies and institutions. In Malawi, five of seven risk management programmes improve early warning systems and crisis prevention, two were likely to improve emergency responses but not even one strategy was found to be likely to strengthen risk management policies and institutions. In Rwanda, four of six risk management strategies were likely to improve early warning systems and crisis prevention, one improved emergency responses and the other could strengthen risk management policies and institutions. Four of nine risk management programmes in Uganda's CIP were likely to improve early warning systems and crisis prevention, another four could improve emergency responses and one was likely to strengthen risk management policies and institutions. In terms of other FAFS elements (increasing food supply, increasing economic opportunities for the vulnerable, reducing hunger and malnutrition), the analysis found that countries generally included three of the four FAFS elements. The plans were generally weak with regard to improving dietary quality through diversification of food consumption and production.

6.1 Conclusions

Choosing a response measure or mix of responses to the high food price crisis was a weighty decision for governments, particularly because food insecurity was already fairly high before the onset of the global price crisis in the study countries. Any programme response requires increased public spending, often at the expense of financing other basic services and at the expense of investment in agricultural production to protect future food needs. International evidence shows that agriculture-led growth is the best engine for the economic development of agriculturally-based developing economies. However, to achieve both parts of MDG one (i.e. reducing hunger and poverty), deliberate efforts are necessary to reach the poor through provision of employment opportunities, reduction of risk and improvement of dietary diversity to ensure sound nutrition. The CAADP FAFS is based on this recognition and recommends a comprehensive approach to agriculture and food security through the inclusion of these elements in national agriculture and food security investment plans. The need for these plans became more evident as the high food price crisis of 2008 emerged and as prices remained high with considerable volatility has endured.

In the first sub-problem, the analysis found that all countries were generally affected by the food price increases. Influenced, among other factors, by the proportion of national stocks that were purchased on the international market, availability of substitute staples on the domestic market and the magnitude of difference between international and domestic market prices, the impact of higher food prices radically differs across countries and population groups. The analysis also found that, at a national level, the average percentage of total household expenditure on food was above 50 per cent and rural households spent more of their income on food than urban households did in 2008, except in Malawi. Therefore, individual households spent more than 60 per cent of their income on food. The 2007/2008 food crisis had significant implications for food security and nutrition, eroding the purchasing power of poor populations. The high food price crisis of 2008 also had serious implications for political stability, causing populations to take to the streets in protest at high food prices.

With regard to the second sub-problem, the analysis found that countries' early responses to the food crisis focused on short-to medium-term strategies rather than encouraging long-term development. At the early food price workshop, Ethiopia was the only country that proposed long-term strategies to invest in marketing, infrastructure, institutions and information.

Governments fairly buffered their populations from food insecurity through implementation of trade-oriented, consumer-oriented and producer-oriented programme responses. Although export restrictions were popular interventions among the five countries, these measures could act as a disincentive for production and could have exacerbated the food crisis. Social protection programmes mitigated the risk of high food prices through provision of food and cash transfers (to purchase food from the market) for immediate consumption. The levels of malnutrition and poverty unexpectedly decreased or remained static in these five countries.

The early food price response workshop seems to have influenced the development of programmes in the CAADP compact and CIPs, despite the fact that the workshop did not intend to assist countries with the development of comprehensive national investment plans. The workshop was a necessary platform for introducing the CAADP FAFS. In sub-problem three, the analysis found that the early response plans were generally systematically translated into CAADP compacts and CIPs as long-term strategies. The CAADP country process led to better policies and investment programmes. However, omission of interventions, like provision of safety net programmes to farmers, could hinder the success of the plans because poor farmers may not be able to afford the high costs of agricultural inputs.

In sub-problem four, the analysis found that although all countries included risk management strategies in the CIPs, the strategies were not comprehensive approaches to risk management. The plans were generally weak with regard to improving dietary quality through diversification of food consumption and production. The strategies focused predominantly on improving early warning systems and crisis prevention and largely ignored programmes to improve emergency responses and strengthen risk management policies and institutions. CIPs lacked action plans for improving the dietary quality, despite the expectation that programmes developed under CAADP would include all FAFS elements in their national agriculture and food security programmes. The omission of nutrition programmes from the CIPs would constrain achievement of CAADP and MDG goals as achieving these goals required significant investment in nutrition as part of a comprehensive programme. Analysis of the programmes found that CIPs generally focused narrowly on the agricultural element and ignored the important elements of ensuring food security for all citizens. While the intent for CIPs is good, large funding gaps could constrain implementation of CIPs, leaving countries vulnerable to future food insecurity and the negative impact of high food prices on

poor consumers in particular. Inadequate monitoring and evaluation systems could increase risk of future crises and constrain the efficient targeting of assistance programmes.

6.2 Policy recommendations

Analysis of the CIPs shows an improvement in national planning for ensuring food security, but there is room for further improvement to buffer nations and their populations in Africa from the risks associated with future food price crises. Countries need to invest in pro-poor agriculture-led growth and institutional capacities to reduce their exposure to high risks of food insecurity. The influence of CAADP on country resilience to the high food price crisis and the usefulness of the early response workshop are evident. The rapid implementation of CIPs is essential to provide more resilient food security systems and comprehensive planning for development and economic growth. Implementation of the CIPs is crucial for preventing further food crises; therefore, governments and the international community should make sure that the CIPs are fully funded.

Investment in comprehensive risk management or risk reduction strategies and programmes is needed. Effective food insecurity risk management ensures that the needs of the most vulnerable are addressed and that the developmental gains are protected against shocks and disasters. Emergency prediction, preparedness and response management are essential for mobilising assistance to meet immediate and dire needs in difficult situations. Ethiopia, specifically, needs to invest more in improving emergency responses and strengthening risk management policies and institutions to comprehensively address risks. These include: investing in monitoring of village level livestock diseases; reporting and prevention mechanisms through extension work; comprehensive risk assessment at all levels by formulation of risk-reduction strategies; and establishing food and financial reserves.

The study recommends the Kenyan government to invest in early warning systems and crisis prevention programmes to comprehensively improve the risk management strategies in their CIP. These early warning systems and crisis prevention interventions would include strengthening of information-monitoring systems relevant to food security and nutrition, and establishing a national emergency response for animal disease control.

The government of Malawi should focus on programmes that strengthen risk management policies and institutions to improve risk management strategies, for example, the

development of a broad-based social protection system, the establishment of objective criteria for selecting among resource transfer modalities, focusing on in-kind food and cash transfers, and the development of policies and institutions for improved management of food surpluses.

Rwanda needs to invest in improving emergency responses and strengthening risk management policies and institutions. For example, the country should establish food and financial reserves, weather-based insurance, and strengthen food security programmes within social protection systems.

It is recommended that Uganda invest in strengthening risk management policies and institutions. These could include: development of policies and institutions for improved management of food surpluses, and incorporation of food security and nutrition under special recovery plans and existing poverty reduction strategies.

Following the 2007/2008 high food prices, strategic food reserves (physical or virtual) have received considerable attention among policy makers at the G8-Summits of 2008 and 2009 – highlighting the importance of food reserves in assisting food-insecure populations during food price increases. At the African Heads of State Summit in July 2003, strategic food reserves also surfaced prominently as a potential solution to African food insecurity. Not having food reserves may lead to significant human suffering if a country faces an emergency like climatic shock or a food crisis (like 2007/2008 food crisis), especially when markets are non-functional. With the world's food-insecure population on the rise due to drought, crop failures, HIV & AIDS and conflicts, African countries need to pay serious attention to food reserves as a buffer to feed their populations. When faced with shocks and emergencies, countries should consider the establishment or expansion of local food reserves (physical or virtual) to address food shortages or food insecurity. Although Ethiopia, Kenya and Malawi have food reserves, these food reserves need to be scaled up to withstand their country's food security problems, and food reserves need to be included in the CIPs to ensure these are budgeted for and made a priority.

One of the key determinants of the magnitude of impact of the global food price crisis was the level of dependency of governments on imported staples. To achieve the increased supply of these staples, current CIPs should generally include programmes that focus on raising productive capacity (for example, promotion of crop-livestock integration, preserve and

enhance the productivity of key staples and commodities while accelerating the distribution of new varieties of food staples). Further potential measures include harnessing trade opportunities (accelerating the production of strategic commodities and removal of policy uncertainties to private trade in food staples) and effective management of natural resources across countries (scaling up of successful integrated natural resource management technologies).

CIPs should promote diversified livelihood activities; urgently improve rural infrastructure (such as roads, electricity and communications); enhance access to credit in the rural areas; enhance market access; create employment opportunities and income generating activities; enhance affordable food outlets in the locality; improve training and capacity building to improve business skills; and promote production of high value products for sale and acquisition of productive assets.

Economic growth has played an important role in improvements in many countries, but the income-undernutrition relationship is often modest. In many developing countries where incomes have increased substantially, undernutrition levels have not declined correspondingly. More specific country interventions are needed to get better results for improved dietary quality through a range of direct interventions aimed at improving nutrition. Ethiopia, Kenya, Malawi and Uganda need to integrate their existing nutrition programmes into CIPs, as is the case with Rwanda's CIP. Nutrition could be improved through focus on food fortification programmes; food supplementation programmes; nutrition education; and supporting diversification of livelihood options of the poor with on-farm and off-farm activities.

6.3 Recommendations for further study

The study recommends that countries invest in agriculture-led growth to boost domestic production, and strengthen institutional capacities regarding national food stock reserves to reduce their dependency on imports and ensure food security. National monitoring and evaluation systems need to be strengthened to evaluate and monitor the implementation of CIPs and to warn about future high food prices. Empirical estimation of the impact of price increases on households, across all CAADP countries, is needed to understand and monitor the impact of price changes and interventions.

REFERENCES

ABBOTT P, HURT C, & TYNER WE, (2008). What's driving food prices? Issue report. Oak Brook: Farm Foundation. URL: <http://www.farmfoundation.org/>. (Accessed 2009, July 05).

ACKELLO-OGUTU C, (2011). Food price shocks: Food security implications and the opportunities in Africa. *May 27 PAAP Electronic Newsletter* 14(10): 1-10.

AFRICAN AGRICULTURAL MARKETING PROGRAMME (AAMP) (2010). Variation in staple food prices in Eastern and Southern Africa: A synthesis. URL: http://www.aec.msu.edu/fs2/aamp/seminar_3/AAMP_Maputo_food_price_variability_synthesis%20.pdf (Accessed 2012, November 24).

AHMED AR, VARGAS H, SMITH LC, WIESMANN D, & FRANKENBUGER T, (2007). The World's most deprived: Characteristics and Causes of Extreme Hunger and Poverty. 2020 Discussion Paper 43. Washington, D.C.: International Food policy Research Institute.

ALOE AM, & BECKER BJ, (2011). Advances in combining regression results in meta-analysis. In: Williams, M & Vogt, WP (Eds). *Innovation in Social Research Methods*. 1st edition. London. Sage Publications.

ARIGA J, JAYNE TS, & NJUKIA S, (2010). Staple food prices in Kenya. Kenya maize marketing and trade challenges. URL: <http://ideas.repec.org/p/ags/midcwp/58559.html> (Accessed 2012, November 16).

ASARECA (ASSOCIATION FOR STRENGTHENING AGRICULTURAL RESEARCH IN EASTERN & CENTRAL AFRICA), (2008). Responding to the food price crisis in Eastern and Southern Africa: Policy options for national and regional action. ASARECA, Entebbe. URL: <http://www.asareca.org> (Accessed 2008, July 15).

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2010). Comprehensive Africa Agriculture Development Programme (CAADP). Accelerating CAADP country implementation: A guide for implementers. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2009a). CAADP Framework for African Food Security (FAFS). New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2009b). Accelerating CAADP country implementation plan. 1st edition, November 2009. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2009c). Comprehensive Africa Agriculture Development Programme (CAADP). Annual Report 2009. New Partnership for Africa's Development (NEPAD), Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2009d). The May 2008 NEPAD high food price workshop. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2009e). The Framework for African Food Security Score Card. New Partnership for Africa's Development (NEPAD).Midrand, Pretoria.
(NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2008a). Comprehensive Africa Agriculture Development Programme. Annual report 2008. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2008b). May 2008 AU/NEPAD food and nutrition security workshop: Accelerating investments in response to high food prices and food insecurity. Workshop concept note, 20th -23rd of May 2008. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2005). Implementing the Comprehensive Africa Agriculture Development Programme and restoring food security. The roadmap: New Partnership for Africa's Development (NEPAD)'s Secretariat. Midrand, Pretoria.

AU/NEPAD (AFRICAN UNION/NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT), (2003). Comprehensive Africa Agriculture Development Programme. New Partnership for Africa's Development (NEPAD). Midrand, Pretoria.

BADIANE O, (2009). Rethinking strategies to accelerate smallholder agriculture growth and rural development. Public Lecture, University of KwaZulu-Natal, Pietermaritzburg, 30 March.

BADIANE O, & ULIMWENGU J, (2009). Growth-poverty convergence: Its measures and application in tracking progress towards the Millennium Poverty Reduction Goal. Washington DC: International Food Policy Research Institute.

BALTZER K, HANSEN H, & LIND KM, (2008). A note on the causes and consequences of the rapidly increasing international food prices. Research report. Institute of Food and Resource Economics, University of Copenhagen. URL: <http://www.danidadevforum.um.dk/en/servicemenu/news/theglobalfoodsituation.htm>
(Accessed 2009, October 03).

BANKS M, (2007). Using visual data in qualitative research. In: Flick, U (Eds). The Sage Qualitative Research Kit. London: Sage Publications.

BARRET CB, & DOROSH A, (1996). "Farmers' welfare and changing food prices: Nonparametric evidence from rice in Madagascar." *American Journal of Agricultural Economics* 78(8): 656-669.

BARUNGI B, NAMASAWA K, SALAMI A, & NSHIMYUMUREMYI A, (2011). The impact of the 2010-11 surges in food prices on African countries in fragile situations: African Development Bank. *Africa Economic Brief* 2(4): 1-8.

BENIN S, KENNEDY A, LAMBERT M, & McBRIDE L, (2010). Monitoring African agricultural development processes and performance: A comparative analysis. ReSAKKS annual trends and outlook report. Washington D.C.: International Food Policy Research Institute.

BENIN S, THURLOW J, DIAO X, McCOOL C, & SIMTOWE F, (2008). Agricultural growth and investment options for poverty reduction in Malawi. Washington D.C.: International Food Policy Research Institute.

BENSON T, MINOT N, PENDER J, ROBELS M, & VON BRAUN J, (2008a). Global food crises: Monitoring and assessing impact to inform policy responses. Food Policy Report. Washington D.C.: International Food Policy Research Institute.

BENSON T, MUGARURA S, & WANDA K, (2008b). Impacts in Uganda of rising global food prices: the role of diversified staples and limited price transmission. *Agricultural Economics (Supplement)*:513-524.

BENSON T, (2004). Africa's food and nutrition situation –Where are we and how did we get here? 2020 discussion paper no. 37. Washington DC: International Food Policy Research Institute.

BOKELOH G, & GERSTER-BENTAYA M, (2010). Food and nutrition security-assessment instruments and intervention strategies. International Training Course, 14-25 June, Feldafing Federal Republic of Germany.

BOON EK, (2004). Food security in Africa: Challenges and Prospects. Management and environmental management, Free University of Brussels, Belgium and University of Ghana, Legon-Accra. URL: <http://www.eolss.net/Sample-Chapters/C16/E1-48-03.pdf> (Accessed 2010, September 09).

BRESCIANI F, & VALDES A, (2007). The role of agriculture in poverty reduction: A synthesis of the case studies. In: Bresciani, F & Valdes, A (Eds). *Beyond Food Production: The role of agriculture in poverty reduction*. Rome and Cheltenham, 3-40: Food and Agriculture Organisation & Edward Elgar.

BRYNGELSSON DK, AHLEN A, AZAR C, & PERSSON UM, (2010). The effect of food-price movements on African households – An investigation of food production and consumption patterns in four African countries. Division of Physical Resource Theory, Department of Energy and Environment, Chalmers University of Technology, Goteborg, Sweden.
URL:[http://www.typo3.fao.org/fileadmin/user_upload/fsn/docs/Bryngelsson et al 2010 effect of prices.pdf](http://www.typo3.fao.org/fileadmin/user_upload/fsn/docs/Bryngelsson_et_al_2010_effect_of_prices.pdf) (Accessed 2011, January 17).

CAADP COMPACT-THIOPIA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-ETHIOPIA), (2009). Ethiopia CAADP compact to

support the successful implementation of CAADP-Ethiopia within Ethiopia's plan for accelerated and sustained development to end poverty (PASDEP). Ethiopia CAADP Compact. Addis Ababa, Ethiopia.

CAADP INVESTMENT PLAN-ETHIOPIA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-ETHIOPIA), (2010). Ethiopia's Agricultural Sector Policy and Investment Framework (PIF) 2010-2020. Final report. Ministry of Agriculture and Rural Development. Ethiopia Investment Plan. Addis Ababa, Ethiopia.

CAADP TECHNICAL REVIEW-ETHIOPIA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-ETHIOPIA), (2010). CAADP Technical Review: Summary of key findings for Ethiopia. September 2010, Addis Ababa, Ethiopia.

CAADP COMPACT-KENYA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-KENYA), (2010). CAADP Compact for Kenya. Implemented through the agricultural sector development strategy. Nairobi, Kenya.

CAADP INVESTMENT PLAN-KENYA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-KENYA), (2010). Agriculture Sector Development Strategy (ASDS). Medium-term investment plan: 2010-2015. Nairobi, Kenya.

CAADP TECHNICAL REVIEW-KENYA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-KENYA), (2010). CAADP post compact review: Country Review Report. Nairobi, Kenya.

CAADP COMPACT-MALAWI (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-MALAWI), (2010). Malawi Compact to support the successful implementation of the agricultural sector wide approach. Lilongwe, Malawi.

CAADP INVESTMENT PLAN (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-MALAWI), (2010). Agriculture Sector Wide Approach Programme Investment Plan (SWAP). Malawi CAADP Compact. Lilongwe, Malawi.

CAADP TECHNICAL REVIEW-MALAWI (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-MALAWI), (2010). CAADP Post Compact Review for Malawi: Country Technical Review Report. Lilongwe, Malawi.

CAADP COMPACT-RWANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-RWANDA), (2007). Rwanda CAADP Compact to support the successful implementation of agriculture under the economic development and poverty reduction strategy. Kigali, Rwanda.

CAADP INVESTMENT PLAN-RWANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-RWANDA), (2009). Rwanda's Agriculture Sector Investment Plan: 2009-2012. Rwanda Investment Plan. Kigali, Rwanda.

CAADP TECHNICAL REVIEW-RWANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-RWANDA), (2009). CAADP Post Compact Review for Rwanda. Kigali, Rwanda.

CAADP COMPACT-UGANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-UGANDA), (2010). Uganda CAADP Compact to support the successful implementation of the agricultural sector development strategy and investment plan (DSIP). Uganda CAADP Compact. Kampala, Uganda.

CAADP INVESTMENT PLAN-UGANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-UGANDA), (2010). Agriculture for Food and Income Security. Agriculture Sector Development Strategy and Investment Plan: 2010/11-2014/15. Uganda Investment Plan. Kampala, Uganda.

CAADP TECHNICAL REVIEW-UGANDA (COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME-UGANDA), (2010). CAADP Post Compact Review for Uganda: Country Review Report. Kampala, Uganda.

CAPEHART T, & RICHARDSON J, (2008). Food price inflations: Causes and impacts. Congressional Research Service. URL: <http://www.mendeley.com/research/food-price-inflation-causes-and-impacts-1> (Accessed 2009, December 15).

CFS HLPE (COMMITTEE ON WORLD FOOD SECURITY HIGH LEVEL PANEL OF EXPERTS), (2011). Price volatility and food security. A report by the high panel of experts on Food Security and Nutrition of the committee on World Food Security, Rome 2011.

CGIAR-COLLECTIVE ACTION NEWS (CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH-COLLECTIVE ACTION NEWS), (2009). Food prices: Global smiles, regional frowns? Collective Action News, Publication of the Alliance of CGIAR Centres, Issue No 6, March 2009. URL: http://www.asareca.org/resources/reports/resp2food_pr_main.pdf (Accessed 2009, April 01).

CHASE SE, (2011). Narrative inquiry. In: Denzin, NK & Lincoln, YS (Eds). The Sage Handbook of Qualitative Research. 4th edition. Thousand Oaks: Sage Publications.

CHIRWA EW, & DORWARD A, (2012). Private sector participation in the farm input subsidy programme in Malawi, 2006/07-2011/12. Evaluation of the farm input subsidy programme, Malawi. Working paper (Draft). URL: [http://www.wadonda.com/Chirwa and Dorward 2012 Private Sector Participation FISP Malawi_Final.pdf](http://www.wadonda.com/Chirwa_and_Dorward_2012_Private_Sector_Participation_FISP_Malawi_Final.pdf) (Accessed 2012, December 04).

CHIRWA E, (2009). The 2007-2008 food price swing: Impact and policies in Malawi. Discussion paper project on policies for good economic management of food and price swings in Africa. Food and Agriculture Organisation (FAO) Trade and Markets Division. University of Malawi, Chancellor College, Department of Economics URL: http://www.fao.org/es/esc/foodpriceswing/papaers/Price%20Swings_malawi.pdf(Accessed 2010, November 11).

CHRISTIAENSEN L, (2011). “East Asia’s long run rise to its rice challenge”. Note, April 29. Washington, D.C.: The World Bank.

CLAY E, (2002). Food security: Concepts and measurement. Paper for Food & Agriculture Organisation (FAO) expert consultation on trade and food security: Conceptualising the linkages. Food and Agriculture Organisation of the United Nations. Rome 11-12 July 2002. Published as Chapter 2 of trade reforms and food security: Conceptualising the linkages. FAO, 2003. Rome.

CLOVER, J, (2003). Food security in Sub-Saharan Africa. *African Security Review* 12(1): 5-15.

COADY DP, DOROSH P, & MINTEN B, (2009). Evaluating alternative policy responses to higher world food prices: The case of increasing rice prices in Madagascar (2008-12). *American Journal of Agricultural Economics* 91(3): 711-722.

COHEN MJ, & GARRETT JL, (2009). The food price crisis and urban (in)security. Human settlements working paper series. London: International Institute for Environment and Development (IIED).

COMMUNITY OF THE EUROPEAN COMMISSION, (2007). Advancing African Agriculture: Proposal for continental and regional level cooperation. Commission of the European Communities (CEC), Brussels.

COMPTON J, WIGGINS S, & KEATS S, (2010). Impact of the global food crisis on the poor: What is the evidence? London: Overseas Development Institute. URL: <http://www.odi.org.uk/resources/download/5187.pdf>(Accessed 2011, March 07).

CORBETT JEM, (1998). Famine and household coping strategies. *World Development* 16 (9): 1099-1112.

CRESWELL JW, (2007). Qualitative inquiry and research design: Choosing Among Five Approaches. 2nd edition. Thousand Oaks: SAGE Publications.

CRETI P, (2010). The impact of cash transfers on local markets: A case study of unstructured markets in Northern Uganda. Oxfam. URL: <http://www.cashlearning.org/downloads/resources/calp/impact-of-cash-transfers-on-local-markets-text-only.pdf> (Accessed 2012, January 06).

CUESTA J, (2011). A qualitative analysis of policymaking in the food price crisis in the Andean region: Preparing for the next crisis. *European Journal of Development Research* 23 (1): 72-93.

DANE FC, (2011). Evaluating research methodology for people who need to read research. Washington D.C.: Sage Publications.

DE JANVRY A, & SADOULET E, (2009). The global food crisis and Guatemala: What Crisis and for Whom? University of California at Berkeley. URL: <http://areweb.berkeley.edu/~sadoulet/papers/GuatemalaFoodPricesMay09.pdf> (Accessed 2010, October 10).

DE LA TORRE UGARTE D, & MURPHY S, (2008). The global food crisis: Creating an opportunity for fairer and more sustainable food and agriculture systems worldwide. Ecofair trade dialogue discussion paper 11. HenrichBoellStiftung, Berlin.

DENZIN N, & LINCOLN Y, (2005). The discipline and practice of qualitative research. In: Denzin, N & Lincoln, Y (Eds). *The Sage Handbook of Qualitative Research*. 3rd edition. Thousand Oaks: Sage Publications.

DEVEREUX S, (2001). Livelihood insecurity and social protection: re-emerging issue in rural development. *Development Policy Review* 19(4): 517-519.

DFID (DEPARTMENT FOR INTERNATIONAL DEVELOPMENT), (2005). Growth and poverty reduction: The role of agriculture. Department for International Development (DFID) Policy Paper. London: Department for International Development.

DIAO X, FAN S, HEADEY D, JOHNSON M, PRATT AN, & YU B, (2008). Accelerating Africa's food production in response to rising food prices: Impacts and requisite actions. Regional Strategic Analysis and Knowledge Support System (ReSAKSS), Washington D.C.: International Food Policy Research Institute.

DOROSH PA, DRADRI S, & HAGGBLADE S, (2009). Regional trade, government policy and food security: recent evidence from Zambia. *Food policy* 34: 350-366.

DORWARD A, (2012). The short and medium term impacts of rises in staple food prices. Policy Brief 52, Future Agricultures, (future-agricultures.org).

DORWARD A, & CHIRWA E, (2011). The Malawi agricultural input subsidy programme: 2005/06 to 2008/09. *International Journal of Agricultural Sustainability* 9(1): 232-247.

DORWARD A, CHIRWA E, & JAYNE TS, (2010). The Malawi agricultural inputs subsidy programme, 2005/6 to 2008/9. URL: http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/MAIP_may_2010.pdf (Accessed 2012, April 04).

DORWARD A, CHIRWA E, KELLY V, JAYNE T, STATER R, BOUGHTON D, (2008a). Evaluation of the 2006/7 agricultural input subsidy programme, Malawi. Final report. School of Oriental and African Studies (SOAS), London. URL: http://www.wahenga.org/sites/default/files/library/Malawi_AISP_Final_Report.pdf (Accessed 2012, March 29).

DORWARD A, CHIRWA E, BOUGHTON D, CRAWFORD E, JAYNE T, STATER R, KELLY V, TSOKA M, (2008b). Towards 'smart' subsidies in agriculture? Lessons from recent experience in Malawi. Natural resource perspectives. URL: <http://www.odi.org.uk/resources/docs/3341.pdf> (Accessed 2012, March 23).

D'SOUZA A, & JOLLIFFE D, (2010). Rising food prices and coping strategies. Household-level evidence from Afghanistan. Policy research working paper 5466. URL: <http://www->

wds.worldbank.org/servelet/WDSContentServer/WDSP/IB/2010/11/01/000158549_20101101163126/Renderend/pdf (Accessed 2011, May 29).

DUTTA I, GUNDERSEN C, & PATTANAIL PK, (2006). Measures of food insecurity at the household level. Wider Research Paper, 2006/95. United Nations University. Helsinki: World Institute for Development Economics Research.

ECOSOC (ECONOMIC & SOCIAL COUNCL), (2009). The state of food security in Africa. Economic Commission for Africa. Committee on food security and sustainable development sixth session. Regional implementation meeting for CSC-18, 27-30 October 2009, Addis Ababa, Ethiopia.

ECOWAS & CILLS (ECONOMIC COMMUNITIES OF WEST AFRICAN STATES & PERMANENT INTERS-TATE COMMITTEE FOR DROUGHT CONTROL IN THE SAHEL), (2008). Memorandum on rising food prices: Situation, outlook, strategy and measures advocated. Experts Meeting, Abuja, Nigeria, May.

ELLIS F, (2000). Rural livelihoods and diversity in developing countries, Oxford, Oxford University Press.

FAN S, TORERO M, & HEADEY D, (2011). Urgent actions needed to prevent recurring food crisis. International Food Policy Research Institute Policy Brief 16. Washington D.C.: International Food Policy Research Institute.

FAN S, (2010). Halving hunger: Meeting the first Millennium Development Goal through business unusual: Food Policy Report. Washington, D.C.: International Food Policy Research Institute. URL: http://www.icosgroup.net/static/foodsec/text/IFPRI_halving_hunger.pdf (Accessed 2010, October 10).

FAN S, & ROSEGRANT MW, (2008). Investing in agriculture to overcome the world food crisis and reduce poverty and hunger. The International Food Policy Research Institute's Brief 3. Washington D.C.: International Food Policy Research Institute.

FAO (FOOD & AGRICULTURE ORGANISATION), (2012). Food insecurity in the Horn of Africa. The scale and impact of food insecurity. FAO Corporate Document Repository [WWW document] URL: <http://www.fao.org/DOCREP/003/X8530E/x8530e02.htm> (Accessed 2011, December 25).

FAO (FOOD & AGRICULTURE ORGANISATION), (2011a). Regional consultation on policy and programmatic actions to address high food prices in Eastern Africa. Summary of proceedings. FAO Sub-regional office for Eastern Africa, 17-18 March, Addis Ababa, Ethiopia.

FAO (FOOD & AGRICULTURE ORGANISATION), (2011b). FAO's initiative for soaring food prices: Guide for Policy and Programmatic Actions at Country Level to Address High Food Prices. Rome: Food & Agriculture Organisation.

FAO (FOOD & AGRICULTURE ORGANISATION), (2009a). Assessment of the world food security and nutrition situation. Committee on World Food Security, 34th Session. Rome: Food & Agriculture Organisation.

FAO (FOOD & AGRICULTURE ORGANISATION), (2009b). Crop prospects and food situation. Number 2, April 2009. URL: <http://www.fao.org/docrep/011/ai481e/ai481e06.htm> (Accessed 2010, May 30).

FAO (FOOD & AGRICULTURE ORGANISATION), (2009c). The transmission of international maize price signals in Eastern and Southern Africa. Technical Brief Number. 2, Policies for effective management of food price swing in Africa. Rome: Food & Agriculture Organisation.

FAO (FOOD & AGRICULTURE ORGANISATION), (2008a). Country responses to the food security crisis: Nature and preliminary implications of the policies pursued. Report prepared for Food and Agriculture Organisation. Rome: Food & Agriculture Organisation.

FAO (FOOD & AGRICULTURE ORGANISATION), (2008b). Food and Agriculture Organisation's Initiative on Soaring Food Prices. Guide for immediate country level action. Second draft. URL: http://www.iaahp.net/iaahnews/detail/en/news/6535/icode/7/?no_cache=1 - 13k-pdf. (Accessed 2009, February 21).

FAO (FOOD & AGRICULTURE ORGANISATION), (2008c). National policy responses to high food prices, economic and social perspectives policy brief 1, Rome: Food & Agriculture Organisation.

FAO (FOOD & AGRICULTURE ORGANISATION), (2008d). An introduction to the basic concepts of food security. EC-FAO Food Security Programme. URL: http://www.foodsec.org/docs/concepts_guide.pdf (Accessed 2010, July 25).

FAO (FOOD & AGRICULTURE ORGANISATION), (2008e). Initiative on Soaring Food Prices. Programme document: Aiming to reduce food insecurity caused by soaring food prices. URL: http://www.fao.org/fileadmin/user_upload/ISFP/ISFP_Programme_Document.pdf (Accessed 2010, January 30).

FAO (FOOD & AGRICULTURE ORGANISATION), (2006). Food security and agricultural development in sub-Saharan Africa: Building a case for more public support. Main report. URL: http://www.fao.org/docs/up/easypol/462/africa_food-sec_agric-dev-en.pdf (Accessed 2011, July 11).

FAO (FOOD & AGRICULTURE ORGANISATION), (2005). Food and Agriculture Organisation and the challenge of the Millennium Development Goals: The road ahead. URL: <http://www.ftp://ftp.fao.org/docrep/fao/meeting/009/j5259e/j5259e00.pdf> (Accessed 2009, July 13).

FAO (FOOD & AGRICULTURE ORGANISATION), (2004). Implementation of the Comprehensive Africa Agriculture Development Programme (CAADP) of NEPAD and related sub-items, in: Twenty-third regional conference for Africa, 1-5 March, Johannesburg, South Africa.

FAO (FOOD & AGRICULTURE ORGANISATION), (2003). Trade reforms and food security. URL: http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/Y4671E/y4671e06.htm (Accessed 2006, June 06).

FAO (FOOD & AGRICULTURE ORGANISATION), (1997). Food, Nutrition and Agriculture. URL: http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/W5849T/w5849t00.htm (Accessed 2006, June 15).

FAO (FOOD & AGRICULTURE ORGANISATION), (1996). Rome declaration on world food security. World Food Summit. 13-17 November. Rome: Food & Agriculture Organisation.

FAO-DFID (FOOD & AGRICULTURE ORGANISATION-DEPARTMENT FOR INTERNATIONAL DEVELOPMENT), (2009). Policies for good economic management of food price swings in African countries. Analysis and research focus of the project. URL: <http://www.fao.org/es/esc/foodpriceswing/analysis.html> (Accessed 2011, January 19).

FAO-IFAD-WFP (FOOD & AGRICULTURE ORGANISATION-INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT-WORLD FOOD PROGRAMME), (2008). High food prices: Impact and recommendations for actions. Paper prepared by FAO and IFAD for the meeting of the Chief Executive Board for Coordination on 28-29 April 2008, Berne, Switzerland.

FEWS NET, (2011). Food price trends in the Middle East and North Africa. February 2011 executive brief. FEWS NET Washington. USAID. URL: <http://www.fews.net> (accessed 2011, June 17).

FLICK U, (2009). An introduction to qualitative research. 4th edition. London: Sage Publications.

FRANKENBERGER TR, (1992). Indicators and data collection methods for assessing household food security. In: Maxwell, S & Frankenberger, TR. (Eds). Household Food Security: Concepts, indicators and measurement. A technical review. New York and Rome: UNICEF and IFAD. pp 73-134.

GHI (GLOBAL HUNGER INDEX), (2008). The challenge of hunger. Bonn, Washington D.C.: International Food Policy Research Institute.

GIBBS G, (2007). Analysing qualitative data. In: Flick, U (Eds). The Sage Qualitative Research Kit. 1st edition. London: Sage Publications.

GREEN BN, JOHNSON CD, & ADAMS A, (2006). Writing narrative literature reviews for peer-reviewed journals: Secrets of the trade. *Journal of Chiropractic Medicine* 5(3):101-117.

GROSS R, SCHOENEBERGER H, PFEIFER H, & PREUSS HA, (2000). The four dimensions of food security: Definitions of Food and Nutrition Security. URL:

http://www.foodsec.org/DL/course/shortcourseFA/en/pdf/P-01_RG_Concept.pdf (Accessed 2008, April 10).

HAGGBLADE S, DJURFELD AA, NYIRENDA DB, LODIN JB, BRIMER L, CHIONA M, CHITUNDU M, CHIWONA-KARLTUN L, CUAMBE C, DOLISLAGER M, DONOVAN C, DROPELMANN K, JIRSTROM M, KAMBEWA E, KAMBEWA P, MAHUNGU NM, MKUMBIRA J, MUDEMA J, NIELSON H, NYEMBE M, SALEGUA VA, TOMO A, & WEBER M, (2012). Cassava commercialisation in Southeastern Africa. *Journal of Agribusiness in Developing and Emerging Economies* 2(1): 4-40.

HAGGBLADE S, & DEWINA R, (2010). Staple food prices in Uganda. Prepared for the Comesa policy seminar on “Variation in staple food prices: Causes, consequence and policy options” Maputo, Mozambique, 25-26 January 2010, under the African Agricultural Marketing Project (AAMP). URL: http://ageconsearch.umn.edu/bitstream/58553/2/AAMP_Maputo_25_Uganda_ppr.pdf (Accessed 2011, August 10).

HARTTGEN K, & KLASSEN S, (2012). Analysing nutritional impacts of price and income related shocks in Malawi and Uganda. Working paper of the United Nations Development Programme. URL: <http://web.undp.org/africa/knowledge/WP-2012-014-Harttgen-klasen-nutritional-impacts-shocks-malawi-uganda.pdf> (Accessed 2012, November 22).

HEADEY D, & FAN S, (2010). Reflections on the global food crisis. How did it happen? How has it hurt? And how can we prevent the next one? Research monograph 165. Washington D.C.: International Food Policy Research Institute. URL: <http://www.ifpri.org/sites/default/files/publications/rr165.pdf> (Accessed 2012, December 01).

HEADEY D, MALAIYANDI S, & FAN S, (2009). Navigating the perfect storm. Reflections on the food, energy and financial crises. International Food Policy Research Institute (IFPRI) Discussion Paper 00889. Washington D.C.: International Food Policy Research Institute.

HEADEY D, & FAN S, (2008). Anatomy of a crisis: The causes and consequences of surging food prices. International Food Policy Research Institute (IFPRI) Discussion Paper 00831. Washington D.C.: International Food Policy Research Institute.

HELBLING T, MERCER-BLACKMAN V, & CHENG K, (2008). Commodities boom: Riding a wave. *Finance and Development*. 45 (1): 10-15.

HENDRIKS SL, (2011). Overview: Trade for nutrition. Plenary technical paper presented at the first Commemoration of the Africa Food Security and Nutrition Day, 27-28 October, Midrand.

HENDRIKS SL, (2010). Research Development Programme. Paper submitted for high food price project's funding at the University of Pretoria. Hatfield, South Africa.

HENDRIKS SL, (2005). The challenges facing empirical estimation of household food (In)security in South Africa. *Development Southern Africa* 22(1): 103-123.

HENDRIKS SL, & DRIMIE S, (2010). The global food crisis and African responses: Lessons for emergency response planning. University of Pretoria, Pretoria, South Africa.

HENDRIKS SL, KIAMBA JM, NGIDI MS, & KALIMA E, (2009a). Country responses to high food prices. Paper prepared for the African Union/NEPAD Joint Meeting of the Ministers of Agriculture, Land and Livestock and Heads of State Meeting. Presented to the Experts' meeting 23&24 April, Addis Ababa.

HENDRIKS SL, DRIMIE S, CHINGONDOLE S, & MERZOUK Q, (2009b). Livelihoods-Based Participatory Analysis (LiPA). Food security programming and policy toolkit. African Centre for Food Security, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

HIGH LEVEL TASK FORCE ON THE GLOBAL FOOD SECURITY CRISIS, (2008). Comprehensive Framework for Action. United Nations General Assembly. New York.

HODDINOTT J, (1999). Choosing outcome indicators of household food security. Technical Guide No7. International Food Policy Research Institute. URL: <http://www.ifpri.org> (Accessed 2006, April 19).

IFPRI (INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE), (2008). "Global food crises: Monitoring and assessing impact to inform policy responses", IFPRI Issues Brief Number 55, October, Washington D.C. URL: http://www.ifpri.org/sites/default/files/publications/ib55_0.pdf. (Accessed 2009, September 05).

IFPRI (INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE), (2007). IFPRI's Africa Strategy. Toward Food and Nutrition Security in Africa. Research and capacity building. Washington DC: International Food Policy Research Institute. (IFPRI). URL: <http://www.reliefweb.int/rw/lib.nsf/db900sid/JBRN.../IFPRI%20jan2007.pdf?> (Accessed 2009, January 20).

KAMARA AB, MAFUSIRE A, CASTEL V, KURZWEIL M, VENCATACHELLUM D, & PLA L, (2009). Soaring food prices and Africa's vulnerability and responses: An update, Working Papers Series No. 97, African Development Bank, Tunis, Tunisia. URL: <http://www.afdb.org> or http://www.fanrpan.org/documents/d00782/WPS_working_paper_97.pdf (Accessed 2010, May 10).

KEATS S, WIGGINS S, COMPTON J, & VIGNERI M (2010). Food price transmission: rising international cereals prices and domestic markets. Project Briefing No. 48. London: Overseas Development Institute (ODI). URL: http://www.Reliefweb.int/rw/lib.nsf/db900sid/EGUA-8A9P8G/sfile/odi_food_price_transmission_oct2010.pdf (Accessed 2010, December 15).

KELLY C, (2003). Acute food insecurity in mega-cities: Issues and assistance options. Benfield Hazard Research Centre. Disaster studies working paper 7. URL: <http://www.abuhrc.org/publications/workingpaper%20paper%207.pdf> (Accessed 2011, November 11).

KENYA NATIONAL BUREAU OF STATISTICS (2010). Kenya Demographic and Health Survey 2008-09. URL: <http://www.measuredhs.com/pubs/pdf/FR229/FR229.pdf> (Accessed 2012, December 17).

KHEMMARATH S, (2002). Key concepts of food security. URL: http://www.nafri.org.la/document/sourcebook/Sourcebook_eng/Volume1/13_conceptsfocuse_c_sitha.pdf(Accessed 2011, September 10).

KODITHUWAKKU S, & WEERAHEWA J, (2011). Coping with food price hikes: Strategies of the poor in Kandy, Sri Lanka. Asia-Pacific Research and Training Network on Trade Working Paper Series, No. 100, May 2011. URL: <http://www.unescap.org/tid/artnet/pub/wp10011.pdf> (Accessed 2012, February 23).

KOLAVALLI S, FLAHERTY K, AL-HASSAN R, & BAAH KW, (2010). Do Comprehensive Africa Agriculture Development Programme (CAADP) processes make a difference to country commitments to develop agriculture? The case of Ghana. Development strategy and governance division. Washington DC: International Food Policy Research Institute. (IFPRI).

MACDONALD K, (2008). Using documents. In: Gilbert, N (Eds). *Researching Social Life*.3rd edition. London: Sage Publications.

MARSHALL C, & ROSSMAN B, (2011). *Designing qualitative research*.5th edition. Thousand Oaks, California: Sage Publications.

MAXWELL S, (1996a). Food security: a post-modern perspective. *Food policy* 21(2): 155-170.

MAXWELL S, (1996b). Review article. Perspectives on a new world food crisis. *Journal of International Development* 8(6): 859-867.

MAXWELL S, & SLATER R, (2003).Food policy old and new. *Development Policy Review* 21(5-6): 531-553.

MAXWELL S, & FRANKENBERGER TR, (1992). Household food security: Concepts, indicators, measurements: *A technical review*. Rome. International Fund for Agriculture Development and World Food Programme.

MAXWELL D, WATKINS B, WHEELER R, & COLLINS G, (2003). The Coping Strategies Index: A tool for rapid measurement of household food security and impact of food aid programs in humanitarian emergencies. CARE and World Food Programme. Rome.

MEIJERINK G, ROZA P, & VAN BERKUM S, (2009). East African governments' responses to high cereal prices.Policy supporting research for the Ministry of Agriculture, Nature and Food Quality. Theme: International cooperation, cluster: Markets, trade and sustainable rural development. LEI Wageningen UR, The Hague. URL: <http://www.lei.dlo.nl/publicaties/PDF/2009/2009-102.pdf> (Accessed 2010, January 15).

MINDE IJ, CHILONDA P, & SALLY H, (2008). Rising global food prices-policy challenges and options for Southern Africa. ReSAKSS: Pretoria.

MINISTRY OF FINANCE AND ECONOMIC DEVELOPMENT- ETHIOPIA, (2010). Ethiopia 2010 Millennium Development Goals Report for 2010. Addis Ababa. URL: http://web.undp.org/africa/documents/mdg/ethiopia_september2010.pdf (Accessed 2011, July 15).

MINISTRY OF DEVELOPMENT PLANING AND COOPERATION-MALAWI, (2010). Malawi Millennium Development Goals Report for 2010. Lilongwe. URL: <http://planipolis.iiep.unesco.org/upload/Malawi/MalawiMDGs2010Report.pdf> (Accessed 2011, July 15).

MINISTRY OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT-UGANDA, (2010). Millennium Development Goals Report for Uganda 2010. Accelerating progress towards improving maternal health. URL: <http://www.google.co.za/search?q=Millennium+Development+Goals+Report+for+Uganda+2010.+Accelerating+progress+towards+improving+maternal+health&btnG=Sesha&hl=zu&gbv=2&safe=activepdf>. (Accessed 2011, June 24).

MINOT N, (2011). Transmission of world food price changes to markets in Sub-Saharan Africa. International Food Policy Research Institute Discussion Paper 01059. Washington DC.: International Food Policy Research Institute.

MINOT N, (2010a). Food price stabilisation: Lessons from Eastern and Southern Africa. Paper prepared for the Fourth African Agricultural Markets Programme (AAMP) policy symposium, Agricultural Risks Management in Africa: Taking stock of what has and hasn't worked, organised by the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) and the Common and Market for Eastern and Southern Africa (COMESA).

MINOT N, (2010b). Staple food prices in Malawi. Prepared for the Comesa policy seminar on "Variation in staple food prices: Causes, consequence and policy options" Maputo, Mozambique, 25-26 January 2010, under the African Agricultural Marketing Project (AAMP). URL: http://ageconsearch.umn.edu/bitstream/58558/2/AAMP_Maputo_22_Malawi_ppr.pdf (Accessed 2012, November 16).

MITCHELL D, (2008). A note on rising food prices. Policy research working paper No. 4682. The World Bank, Washington D.C.: World Bank.

MITTAL A, (2009). The 2008 food price crisis: Rethinking food security policies. G-24 discussion paper series. Research papers for the intergovernmental group of twenty-four on international monetary affairs and development. United Nations Conference on Trade and Development. New York and Geneva, June 2009.

MJONONO M, NGIDI M, & HENDRIKS S, (2009). Investigating household food insecurity coping strategies and impact of crop production on food security using Coping Strategies Index (CSI). Paper presented at the 17th International Farm Management Association Congress, Bloomington/Normal, Illinois, USA, July.

MKANDAWIRE RM, BADIANE O, & HENDRIKS SL, (2009). The Comprehensive Africa Agriculture for Food Security Approach: The Comprehensive Africa Agricultural

Development Programme as a catalyst for a global agricultural development paradigm shift. NEPAD, Pretoria.

MOUSSEAU F, (2010). The high food price challenge: A Review of Responses to Combat Hunger. Oakland, CA: The Oakland Institute.

NEPAD (2004). NEPAD study to explore further options for food security reserve systems in Africa. Midrand: NEPAD Secretariat.

NGONGI N, (2008). Global food prices. Policy implications of high food prices for Africa. Annual report for 2008. Washington, D.C.: International Food Policy Research Institute.

NIERENBERG D, (2010). For poor households in Rwanda, One cow per family makes a difference. URL: http://www.huffingtonpost.com/danielle-nierensberg/for-poor-households-inrw_b_511171.html (Accessed 2011, November 29).

OBAYELU AE, (2011). Cross-countries analysis of rising food prices: policy responses and implications on emerging markets. *International Journal of Emerging Markets* 6(3): 254-275.

OGG CW, (2010). Commodity price levels in poor countries: Recent Causes and Remedies. Policy issues and the Agricultural & Applied Economics Association. JEL Classification: 013. URL: <http://www.aaea.org/publications/policy-issues/> (Accessed 2011, March 10).

OKELLO JJ, (2009). The 2007-2008 food price swing: Impact and Policies in Kenya. Discussion paper project on policies for good economic management of food and price swings in Africa. Food and Agriculture Organisation (FAO) Trade and Markets Division University of Nairobi, Department of Economics. URL :http://www.fao.org/es/esc/foodpriceswing/papaers/Price%20Swings_Kenya.pdf (Accessed 2010, November 11).

OLARINDE LO, & KUPONIYI FA, (2005). Rural livelihood and food consumption patterns among households in Oyo State, Nigeria: Implications for food security and poverty eradication in a deregulated economy. *Journal of Social Sciences* 11(2): 127-132.

OMAMO SW, (1998). Transport costs and small holder cropping choices: An application to Siaya District, Kenya. *American Journal of Agricultural Economics* 80 (1):116-123.

OMILOLA B, & LAMBERT M, (2009). Weathering the storm: Agricultural Development, Investment, and Poverty in Africa Following the Recent Food Price Crisis. ReSAKSS Annual Trends and Outlook Report. Washington, D.C.: International Food Policy Research Institute.

ORTIZ I, CHAI J, & CUMMINS M, (2011). Escalating food prices: The threat to the poor households and policies to safeguard a recovery for all. Social and economic policy working paper. UNICEF policy and practice. United Nations Children's Fund (UNICEF), New York, 2011.

OXFAM (2012). Food crises doomed to repeat until leaders find courage to fix problems. URL: <http://www.oxfam.org.nz/sites/default/files/reports/Media%20advisory%20-%20Food%20Price%20Crisis.pdf> (Accessed 2012, December 02).

OXFAM (2008). Double-edged prices. Lessons from the food price crisis: 10 actions developing countries should take. Oxfam Briefing Paper 121. URL: <http://www.oxfam.org/sites/www.oxfam.org/files/bp121-double-edged-prices-lessons-from-food-price-crisis-0810.pdf> (Accessed 2011, November 15).

PAAP (POLICY ANALYSIS and ADVOCACY PROGRAMME), (2011a). Volatility of agricultural markets: Causes and options for policy solutions. *PAAP* June 24 electronic newsletter 14(12): 1-10.

PAAP (POLICY ANALYSIS and ADVOCACY PROGRAMME), (2011b). Food price shocks: Food security implications and the opportunities in Africa. *PAAP* May 27 electronic newsletter 14(10): 1-10.

PATTON MQ, (2002). Qualitative research and evaluation methods. 3rd edition. Thousand Oaks: Sage Publications.

PENDER J, (2008). Food crisis and land. The world food crisis, land degradation, and Sustainable Land Management: Linkages, Opportunities and Constraints. URL: <http://knowledgebase.terrafrica.org/> (Accessed 2009, January 26).

PINSTRUP-ANDERSON P, (2009). Food Security: definition and measurement. *Food Security* 1:5-7.

POLASKI S, (2008). Rising food prices, poverty and the Doha Round: Carnegie Endowment for International Peace. Policy Outlook No. 41, May 2008. URL: http://carnegieendowment.org/files/polaski_food_prices.pdf (Accessed 2010, February 11).

RAGIN CC, (1987). The comparative method. Moving beyond qualitative and quantitative research. Berkeley: University of California Press.

RAPSOMANIKIS G, (2009). The 2007-2008 food price swing: Impact and Policies in Eastern and Southern Africa. Draft commodities and trade technical paper. Trade and Markets Division. Food and Agriculture Organisation (FAO) of the United Nations. URL: http://www.okapi.it/estt/papers/Price%20swings_Southern_Africa.pdf. (Accessed 2010, November 30).

RASHID S, (2011). Grain Reserves, social safety nets, and productivity linkages: Conceptual issues and some empirics from Africa. URL: http://addis2011.ifpri.info/files/2011/10/Paper_2B_Rashid-Shahidur.pdf (Accessed 2012, December 04).

RASHID S, & MINOT N, (2010). Staple food prices in Ethiopia. Prepared for the Comesa policy seminar on “Variation in staple food prices: Causes, consequence and policy options” Maputo, Mozambique, 25-26 January 2010, under the African Agricultural Marketing Project (AAMP). [WWW document] URL: http://www.aec.msu.edu/fs2/aamp/seminar_3/aamp_maputo_12_spatial_price_variation.pdf (Accessed 2012, November 22).

RAVALLION M, & DATT G, (1996). Is targeting through a work requirement efficient? : Some evidence for rural India, In: van der Walle, D & Nead, K (Eds). Public Spending and the Poor: Theory of evidence. Washington D.C.: World Bank.

REMBOLD F, HODGES R, BERNARD M, KNIPSCHILD H, LEO O, (2011). The African postharvest losses information system. An innovative framework to analyse and compute quantitative postharvest losses for cereals under different farming and environmental conditions in East and Southern Africa. URL: <http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/15877/1/lbna24712enc.pdf> (Accessed 2012, March 28).

ReSAKSS (REGIONAL STRATEGIC ANALYSIS AND KNOWLEDGE SUPPORT SYSTEMS), (2011). Africa wide overview[Online]. Washington D.C.: ReSAKSS. URL: <http://www.resakss.org/> (Accessed 2011, October, 10).

ReSAKSS (REGIONAL STRATEGIC ANALYSIS AND KNOWLEDGE SUPPORT SYSTEM), (2010). Monitoring African agriculture development and performance. A comparative analysis. ReSAKSS Annual trends and outlook report for 2010. Washington D.C.: International Food Policy research Institute.

RIELY F, MOCK N, COGILL B, BAILEY L, & KENEFIC E, (1999). Food security indicators and framework for the use in the monitoring and evaluation of food aid programmes. Washington D.C.: United States Agency for International Development (USAID).

ROSEGRANT MWSA, CLINE W, LI T, SULSER B, & VALMONTE-SANTOS RA, (2005). Looking ahead: Long-term prospects for Africa's agricultural development and security. 2020 Discussion paper 41. Washington D.C.: International Food Policy Research Institute.

ROSHAN B, (2009). Justifications for qualitative research in organisations: A Step Forward. *The Journal of Online Education*, New York. URL: <http://www.nyu.edu/classes/keefe/waoe/deeprosh2.pdf> (Accessed 2012, January 20).

RUGALEMA G, (2000). Coping or struggling? A journey into the impact of HIV/AIDS in southern Africa. *Review of African Political Economy* 28 (86): 537-545.

SAAD MB, (1999). Food security for food insecure: New challenges and renewed commitments. CSD NGO Women's Caucus Position Paper for CSD-6, 2000. Dublin: Centre for Development Studies, University of Dublin.

SCHNEPF R, (2008). High agricultural commodity prices: What are the issues? CRS Report for Congress. Congressional Research Service, Washington, D.C. URL: http://www.assets.opener.com/rpts/RL34474_20080506.pdf (Accessed 2008, March 10).

SCOTT J, (1990). A matter of record. Documentary sources in social research, Cambridge: Polity Press.

SEN A, (1981). Poverty and famines: An Essay on Entitlement and Deprivation. Clarendon Press. Oxford.

SHEERAN J, (2008). Global food prices. High food prices: The challenges and opportunities. International Food Policy Research Institute's Annual Report. Washington, D.C: International Food Policy Research Institute.

SILVERMAN D, (2010). Doing qualitative research.3rd edition. London: Sage Publications.

SMITH M, POINTING J, & MAXWELL S, (1992). Household food security: Concepts and Definitions –An Annotated Bibliography. In: Maxwell, S & Frankenberger, TR (Eds). Household food security: Concepts, Indicators and Measurements. A Technical Review. UNICEF/IFAD, 135-192. New York & Rome.

SNEL E, & STARING R, (2001). Poverty, migration and coping strategies: An introduction. *European Journal of Anthropology* 38: 7-22.

STAATZ JM, BOUGHTON DH, & DONOVAN C, (2009). Food security in developing countries. In: Phoenix, L & Walter, L (Eds). Draft Chapter for critical food issues. Forthcoming Praeger.Greenwood Publishing Group Inc, Westport, CT.

TERRAFRICA, (2009). Food crisis and land. The world food crisis, land degradation, and Sustainable Land Management (SLM): Linkages, Opportunities and Constraints. A TerrAfrica partnership publication. URL: http://www.caadp.net/pdf/FoodCrisis&Land_Paper_English.pdf (Accessed 2010, February 10).

THUROW D, & KILMAN S, (2009). Enough: Why the world's poorest starve during an age of plenty. New York: Perseus Brooks Group.

TIMMER CP, (2011). Managing food price volatility: Approaches at the Global, National and Household Levels. 4th lecture delivered in May 26, 2011, Stanford University. URL: <http://news.stanford.edu/news/2011/may.html> (Accessed 2011, May 30).

TORERO M, (2011). Alternative mechanisms to reduce food price volatility and pricespikes.Foresight project on global food and farming futures. Science review: SR21 Government office for Science. URL: <http://www.bis.gov.uk/assets/bispartners/foresight/docs/food-and-farming/science/11-566-sr21-alternative-mechanisms-to-reduce-food-price-volatility> (Accessed 2011, October 02).

TORERO M, (2010). Wheat price volatility: Panic is baseless and hurts poor people. Press statement, 13 September 2010. Director, Markets, Trade, and Institutions Division. International Food Policy Research Institute (IFPRI). URL: <http://www.ifpri.org/pressrelease/wheat-price-volatility> (Accessed 2011, February 15).

TROSTLE R, (2008). Global agricultural supply and demand: Factors contributing to the recent increase in food commodity prices. ERS Report WRS-0801. Economic Research Service, US Department of Agriculture (USDA). URL: <http://www.ers.usda.gov/publications/wrs0801/> (Accessed 2010, May 22).

TULANE (1992). Livelihood security. URL: <http://www.tulane.edu/~panda2/FS/introduction/FS%20Introduction.htm>. (Accessed 2006, July 11).

TUMUSIIME RP, (2009). Foreword: The Comprehensive Africa Agriculture Development Programme's Framework for African Food Security. New Partnership for Africa's Development (NEPAD). Midrand: NEPAD.

UNITED NATIONS, (2011). Assessing progress in Africa towards the Millennium Development Goals. MDG Report for 2011. United Nations, New York, 2011. URL: <http://www.uneca.org/mdgs2011-.pdf> (Accessed 2011, November 20).

UNITED NATIONS, (2010a). Comprehensive Framework for Action (CFA). United Nations High Level Task Force on the Global Food Security Crisis. Updated Comprehensive Framework for Action, September 2010. URL: http://www.ifad.org/hfs/docs/2010_UCFA_Final.pdf (Accessed 2011, March 14).

UNITED NATIONS, (2010b). The Millennium Development Goals Report for 2010. United Nations, New York, 2010. URL: <http://www.un.org/millenniumgoals/pdf/MDG%20Report%202010%20En%20r15%20-low%20res%2020100615%20-.pdf> (Accessed 2011, January 07).

UNITED NATIONS-RWANDA (UNITED NATIONS-RWANDA), (2010). The Millennium Development Goals Progress Report for 2010: Rwanda Country Report 2010. URL: <http://www.abdn.ac.uk/sustainable-international-development/uploads/files/UNDP%20final%20PA%2030%20October%202010.pdf> (Accessed 2011, March 22).

UNITED NATIONS, (2008). The Millennium Development Goals Report for 2008. United Nations, New York, 2008. URL: <http://www.un.org/millenniumgoals/pdf/The%20Millennium%20Development%20Goals%20Report%202008.pdf> (Accessed 2009, January 19).

UNITED NATIONS, (2007). The Millennium Development Goals: 2007 Progress Chart. URL: <http://www.un.org/millenniumgoals/pdf/mdg2007-progress.pdf> (Accessed 2009, September 10).

UNITED NATIONS, (1997). Report of the Director-General of the Food and Agriculture Organization of the United Nations on the outcome of the World Food Summit, held in Rome from 13 to 17 November 1996. URL: <http://www.unhchr.ch/.../fa74a48227f3e3a0802566a400530b45?> (Accessed 2008, April 17).

UNITED NATIONS, (1975). Report of the World Food Conference. Rome 5-16 November 1974. New York.

UNDP (UNITED NATIONS DEVELOPMENT PROGRAMME), (2010). United Nations Development Programme in Kenya [Online]. UNDP. URL: <http://www.ke.undp.org/index.php/un-and-undp-in-kenya> (Accessed 2011, August, 15).

USAID (UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT), (2009). Humanitarian assistance. USAID responds to global food crisis. Washington D.C. URL: http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/countries/global

[_food_crisis/template/fs_sr/food_insecurity_sr01_05-22-2009%20.pdf](#) (Accessed 2010, September 11).

VAN DER KAM S, (2001). Stage of food insecurity process: Household-level coping mechanisms. URL: <http://www.enonline.net/fex/10gu21.html-20k-Cached-Similar> pages (Accessed 2006, March 23).

VINCK P, BRUNELLI C, TAKENOSHITA K, & CHIZELEMA D, (2009). Rwanda: Comprehensive Food Security and Vulnerability Analysis. Rome: World Food Programme Report. URL: http://reliefweb.int/sites/reliefweb.int/files/resources/72211086F75F0A52C12576700040B3D5-Full_Report.pdf (Accessed 2011, October 16).

VOGT WP, GARDNER LH, & BAKER PJ, (2011). Innovations in program evaluation. In: Williams, M & Vogt, WP (Eds). *The Sage Handbook of Innovations in Social Research Methods*. 1st edition. London: Sage Publications.

VON BRAUN J, & MKANDAWIRE R, (2010). Foreword. In: Haggblade, S & Hazell, PBR (Eds). *Successes in African Agriculture. Lessons for the future*. International Policy Research Institute (IFPRI) and the Johns Hopkins University Press, Baltimore: Washington D.C. P xvii – xviii.

VON BRAUN J, (2008a). Responding to the world food crisis: Getting on the right track. International Food Policy Research Institute (IFPRI)'s Annual Report Essay. Washington D.C.: International Food Policy Research Institute.

VON BRAUN J, (2008b). Food and Financial Crises: Implications for agriculture and the poor. International Food Policy Research Institute (IFPRI). Washington DC: International Food Policy Research Institute.

VON BRAUN J, (2008c). Combining growth and social protection in Africa. Paper presented at the conference on the convergence between social service provision and productivity-enhancing investments strategies, January 29 – 31, 2008. Durban, South Africa.

VON BRAUN J, & TORERO M, (2009a). Implementing physical and virtual food reserves to protect the poor and prevent market failure. International Food Policy Research Institute. 2020 Vision Initiative. URL: <http://www.ifpri.org/pubs/bp/bp010.asp> (Accessed 2011 February 07).

VON BRAUN J, & TORERO M, (2009b). Exploring the price spike. *Choices and the Agriculture & Applied Economics Association*. The magazine of food, farm, and resource issues. URL: <http://www.choicemagazine.org> (Accessed 2009, September 15).

VON GREBMER K, RINGLER C, ROSEGRANT MW, OLOFINBIYI T, WIESMANN D, FRITSCHER H, BADIANE O, TORERO M, & YOHANNES Y, (2012). The Global Hunger Index. The challenge of hunger: Ensuring sustainable food security under land, water and energy stresses. Bonn, Washington D.C., Dublin, October. URL: <http://www.ifpri.org/sites/default/files/publications/ghi12.pdf> (Accessed 2012, December 03).

VON GREBMER K, FRITSCHER H, NESTOROVA B, TOLULOPE O, PANDYA-LORCH R, & YOHANNES Y, (2008). The Global Hunger Index: The Challenge of Hunger 2008, Bonn, Washington D.C., Dublin, October. URL: <http://www.ifpri.org> (Accessed 2009, 04 September).

WELLARD K, & HUGHES D, (2011). Policy into use: Accelerating Agricultural growth through CAADP. Future Agricultures Consortium. Department for International Development. URL: <http://www.google.co.za/search?q=agricultural+growth+and+high+food+prices+&hl=zu&gbv=2&safe=active> (Accessed 2012, March 10).

WEINGARTNER L, (2009). The concept of food and nutrition security. In: Klennert, K (Eds). Achieving Food and Nutrition Security: Actions to Meet the Global Challenge. A training course reader, third edition. InWent –Internationale Weiterbildung GmbH, Capacity Building International, Feldafing, Germany. P 21-51.

WFP (WORLD FOOD PROGRAMME), (2008). Recent food price developments in most vulnerable countries: Issue No. 1. URL: <http://www.home.wfp.org/groups/public/documents/ena/wfp186941.pdf> (Accessed 2009, August 17).

WIGGINS S, (2010). The use of input subsidies in developing countries. Global forum for agriculture – 29-30 November 2010. Policies for agricultural development, poverty reduction and food security. URL: <http://www.oecd.org/dataoecd/50/35/46340359.pdf> (Accessed 2012, April 17).

WIGGINS S, COMPTON J, KEATS S, & DAVIES M, (2010). Country responses to the food price crisis 2007/08. Case studies from Bangladesh, Nicaragua, and Sierra Leone. URL: <http://www.odi.org.uk/resources/download/5097.pdf> (Accessed 2011, February 10).

WILLIAMS M, & VOGT PW, (2011). Introduction. In: Williams, M & Vogt, WP (Eds). The Sage handbook of Innovations in Social Research Methods. 1st edition. London. Sage Publications.

WODON Q, & ZAMAN H, (2009). Higher food prices in Sub-Saharan Africa: Poverty Impact and Policy Responses. Oxford University Press on behalf of the International Bank for Reconstruction and Development/ The World Bank, Washington D.C.: *The World Bank Research Observer* 25(1):157-175.

WODON Q, & ZAMAN H, (2008). Rising food prices in Sub-Saharan Africa: Poverty Impact and Policy Responses. Policy Research Working Paper 4738. The World Bank Human Development Network and Poverty Reduction and Economic Management Network. Washington, D.C.: The World Bank.

WORLD BANK, (2011). Food price watch: Poverty Reduction and Equity Group. Poverty Reduction and Economic Management (PREM) Network. Washington D.C.: The World Bank.

WORLD BANK, (2009). From Agriculture to Nutrition: Pathways, synergies, and outcomes. Agriculture and Rural Development Department, Washington, D.C.: The World Bank.

WORLD BANK, (2008a). World development indicators database. Washington D.C.: The World Bank. URL: <http://data.worldbank.org/data-catalog/world-development-indicators> (Accessed 2009, September, 08).

WORLD BANK, (2008b). Rising food prices: Policy options and the World Bank response. URL: http://siteresources.worldbank.org/NEWS/Resources/risingfoodprices_backgroundnote_apr08.pdf (Accessed 2009, April 01).

WORLD BANK, 2007. World Development Indicators 2007. Washington, D.C., USA.

YU B, YOU L, & FAN S, (2010). Toward a typology of food security in developing countries. International Food Policy Research Institute (IFPRI)'s Discussion Paper 00945. Washington D.C.: International Food Policy Research Institute.

YU-SI L, & WEN-AN H, (2009). Causes and countermeasures for the food crisis in developing countries. *Journal of Asian Agricultural Research* 1(1): 6-8.

ZIMMERMANN R, BRUNTRUP M, KOLAVALLI S, & FLAHERTY K, (2009). Agricultural policies in Sub-Saharan Africa: Understanding and Improving Participatory Policy Processes in African Peer Review Mechanism (APRM) and Comprehensive Africa Agricultural Development Programme (CAADP). German Development Institute. Federal Republic of Germany, Bonn.

APPENDICES

APPENDIX A: Policy Responses to high food prices in the African continent

Policy responses to high food prices in the African Continent (adapted from FAO, 2008a; Benson *et al*, 2008a; World Bank, 2008 and supplemented with information provided by countries in response to a CAADP Pillar 3 country surveys conducted January – March 2009)

Country	Reduce taxes on food grains	Price control/consumer	Cash transfers	Food-for -work	Food rations, stamps and	School feeding	Release stocks at subsidized price	Production support	Increase supply via imports	Lower imports tariffs	Export restrictions	Lower import for fertilizer/ seeds
Algeria							X	X				
Angola					X							
Botswana										X		
Benin		X					X	X				
Burkina Faso	X		X					X		X		
Burundi	X		X	X	X	X						
Cameroon							X			X	X	
Cape Verde		X								X		
Central African Republic								X				
Comoros												
Cote d'Ivoire	X	X								X		
DRCongo	X	X								X		
Djibouti	X	X										
E. Guinea												
Egypt			X	X		X	X				X	
Eritrea		X	X	X			X					
Ethiopia	X	X	X		X		X		X		X	
Gabon												
Gambia										X		
Ghana								X		X		
Guinea								X		X	X	
Guinea Bissau												
Kenya	X		X	X	X	X	X	X	X	X	X	X
Lesotho	X							X		X		
Liberia			X		X			X		X		
Libya				X	X	X		X		X		
Madagascar	X				X		X					

Country	Reduce taxes on food grains	Price control/ consumer	Cash transfers	Food-for -work	Food rations, stamps and	School feeding	Release stocks at subsidized price	Production support	Increase supply via imports	Lower imports tariffs	Export restrictions	Lower import for fertilizer/ seeds
Malawi		X									X	
Mali							X			X		
Mauritania												
Mauritius		X								X		
Morocco	X	X										
Mozambique	X		X									
Namibia										X		
Niger							X	X		X		
Nigeria					X				X			
Rwanda		X					X	X		X	X	
Senegal	X	X						X				
Seychelles							X					
Sierra Leone												
Somalia												
South Africa			X									
Swaziland							X					
Sudan	X	X										
Swaziland							X	X			X	
Tanzania	X				X		X					
Togo		X						X				
Tunisia												
Uganda	X						X	X			X	
Zambia	X											
Zimbabwe		X	X			X						

APPENDIX B: CAADP pillar III implementation guide (operational plan)

The Comprehensive Africa Agriculture Development Programme (CAADP)

Developing an Operational Plan for Pillar III

Developing a regional or country-level Pillar III strategy entails the following 6 steps:

1. Identify the chronically food insecure and those vulnerable to chronic food insecurity, characterize the vulnerable and the causes of food insecurity;
2. Estimate the magnitude of change required to achieve the Pillar III vision and objectives of CAADP;
3. Create an inventory and identify options to achieve the objectives of the vision;
4. Prioritize interventions and costing options to focus on the best returns for an investment plan and addressing the necessary conditions to meet objectives;
5. Review of implementation options, roles, responsibilities and coordination; and
6. Finalize and package an integrated programme that includes an investment and operational plan and arrangements.

Step 1. Identify the chronically food insecure and those vulnerable to chronic food insecurity, characterize the vulnerable and the causes of food insecurity

- Who are the chronically food insecure populations?
- How many people are chronically food insecure or vulnerable to food insecurity?
- What are their characteristics and location?
- Why are they vulnerable? What are the sources and types of vulnerability?
- Who of these target groups are more likely to participate in or benefit directly from agricultural growth?

Step 2: Estimate the magnitude of change required to achieve the Pillar III vision and objectives of CAADP?

This will require estimation of the rate and level of change (in these target groups) required to meet the overall CAADP objective of achieving a growth rate sufficient to achieve the MDG goal of reducing hunger and poverty by half by 2015³.

Step 3: Create an inventory and identify options to achieve the objectives of the vision

For each the four objectives identified in Pillar III (improved risk management; increased supply through increased production and improved market linkages; increased economic opportunities for the vulnerable; and increased quality of diets through diversification of food among the target groups).

- For each above, explain how it contributes to the Pillar vision/objectives;
- What type of change is expected²;
- How it helps the vulnerable;
- Who could be engaged/participate in implementation.

Stocktaking at various levels is necessary. This will include an inventory of programmes, policies and institutions; implementers; stakeholders; and partners related to Pillar III. Stocktaking will also include establishing a baseline to assist in identifying and evaluating the impact of various options to achieve the objectives above. Stocktaking will require answering the following questions relating to

³ Specific tools are being developed for use at county level to assist with this step.

the 4 key objectives of FAFS in consultation with stakeholders, including the target groups themselves.

Improved risk management

- Do you have an operational Early Warning System (EWS⁴) that allows you to measure, monitor and track groups who are vulnerable to food insecurity and shocks (e.g. droughts, floods, market and other shocks), their characteristics and where they live?
- Do you have a sufficiently resourced and functioning programme (including time-bound targets and indicators of progress) to reduce vulnerability to droughts, floods, market and other shocks and are you making progress towards the targets?
- Do you have a crisis response system in place including mechanisms, triggers, teams/actors and emergency resources at national and community levels?
- Do the Government and Development Partners have a framework and commitment that are supportive of the risk management items outlined above?
- Are there constraints to achieving this objective that must be addressed through another CAADP Pillar?

Increased food supply through improved production and market linkages

- What are the primary sources of food for the chronically food insecure or those vulnerable to chronic food insecurity? ie. Are they net purchasers of food?
- What is their current production and consumption (amount and types of foods)?
- What are appropriate and sustainable options for increasing production of food?
- Do they have access to the services that will allow them to exploit their food production potential?
- What are the options to improve market access and operations in the areas where the vulnerable are located to improve food availability?
- What are the policy constraints to increasing production and improving markets for the target groups?
- Are there constraints which must be addressed under other CAADP pillars?

Increased economic opportunities for the vulnerable

- Are the current sources and levels of incomes and assets of these targeted groups increasing sufficiently to sustainably achieve/improve their food security status?
- Do other opportunities exist to improve their food security status, resilience and contribution to growth beyond what is possible under their current activities?
- Do environmental, institutional and policy constraints prevent them from effectively protecting, using and expanding their assets, incomes and livelihood opportunities to sustainably improve their food security status?
- Are these constraints addressed through interventions undertaken under another pillar? If not, how will they be addressed?

Increased quality of diets through diversification of food

- What are the levels of micro-nutrient deficiencies among the vulnerable groups (e.g. iron, vitamin A, iodine)?
- What are the viable options and actions to increase the access by vulnerable groups to diversified food production and supply to improve micro-nutrient intake?

⁴ EWS include indicators related to production, exchange, and consumption at national, regional and community levels for the analysis, monitoring, prediction of potential food crises and estimation of emergency food requirements.

- To what extent are bio-fortification, fortification, food processing and safety technologies being applied at all levels of the food chain to improve dietary quality of the target groups?
- What are the environmental, institutional and policy constraints to food fortification?
- Do mechanisms exist to address these constraints under CAADP? If not, what is the appropriate forum to raise these issues?

Step 4: Prioritizing and costing options to focus on the best returns for an investment plan and addressing the necessary conditions to meet objectives

In consultation with various stakeholders, the options identified need to be prioritized in terms of what is the best way to increase assets and incomes and improve food security and nutrition against the following criteria. Does the action:

- Build resilience to food insecurity of the target groups;
- Reduce food insecurity AND build assets for the target group;
- Help achieve the rate and level of growth required to meet MDG goal 1;
- Have a direct impact on agricultural growth;
- Have a scale that leads to a significant and widespread impacts on the targeted groups;
- Build and/or strengthen Africa's capacity for sustainability of development actions; and
- Provide a cost-effective investment to achieve the objective.

Step 5: Review of implementation options, roles, responsibilities and coordination

In implementation there are various roles of different players. Implementation recognizes there are key players including government, private sector, development partners, technical agencies, NGOs, CBOs, research institutions, producers and organizations, civil society that are involved in implementation. Leadership and coordination is required to ensure all activities contribute to a common agenda, there is accountability, progress is measured and lessons shared. At regional and country levels, the leadership and coordination structure will vary depending on existing capacities and established roles. Once the components of a Pillar III/FAFS strategy or action plan is agreed to, regional or country-level stakeholders will review options for governance, and identify issues and responsibilities for implementation, monitoring and evaluation of the prioritized Pillar III activities as follows:

- What is going on now?
- Are there mechanisms to facilitate coordination and communication?
- Are there systems for inter-ministerial actions?
- Who are the best implementing agencies?
- What are the existing/appropriate institutions for implementation, monitoring, and evaluation?
- Who are the best partners/implementers in terms of synergies and complementarities?

The implementation, monitoring and evaluation processes for Pillar III (as well as the other pillars) should be clearly defined as part of the regional or country-level CAADP Compact that is being established.

Step 6: Finalizing a Pillar III strategy and action plan for inclusion in a CAADP Country or Regional Compact.

After prioritizing actions, developing a resourcing plan, identifying the policy and institutional arrangements, roles and responsibilities of stakeholders, and highlighting actions to be undertaken under other pillars, Pillar III stakeholders will present and advocate Pillar III actions through the CAADP Round Table discussions for inclusion in the final design of the regional or country-level CAADP Compact.

To summarize, elements to be captured in the integrated package include the following:

- Identification of the vulnerable populations targeted for assistance through Pillar III
- Identification of the levels and rates of change in key food security, nutrition, and asset/income indicators required to contribute to country/region specific CAADP and MDG goals
- Actions to be taken at local, national, regional and continental level, with justification for their selection as priority actions.
- The clearly defined roles and responsibilities of various players and partners and mechanisms for coordination and accountability.
- Governance and institutional arrangements required for implementation and sustainability of the actions. Attention should be given to the inter-ministerial coordination requirements.
- The investment plan indicating who can finance what elements, the level of investment and time frames
- Policy alignment or change required to implement the plan of action or areas. It needs to be recognised that in some areas, wider policy and investment debate is required that falls beyond Pillar III (for example land ownership issues) and need to be discussed in the wider CAADP Round Table discussions.
- Establishment or re-alignment of monitoring and evaluation systems to monitor progress, report on progress and prepare for peer review related to achievement of the objectives of the Pillar vision.
- Identified additional capacities and capabilities are required for implementation and how will these be secured or developed.
- What assistance is required in implementation including support from the REC, CAADP lead institutions and their networks.
- At this stage too, countries must identify value-adding action at regional level that will support the country efforts.

APPENDIX C: Template guidelines for completing the initial proposal

These Guidelines consist of the following sections:

1. Rationale, objectives, and key features
2. Guidelines for Content and Structure of PCN
3. Appendix 1: Guidelines for stating the Project Development Objective

RATIONALE, OBJECTIVES, AND KEY FEATURES

This template has the following functions:

- To examine the strategic rationale for government (this should be the first goal) and donors involvement
- To promote consideration of alternative options and strategies
- To obtain early guidance/agreement on issues and approach
- To flag risks and potential mitigation measures
- To seek early guidance on potential safeguard issues, consultation, and disclosure
- To agree on a resource estimate, schedule, and team

The key features of the template are:

- It is based on CAADP Pillar 3 Framework for African Food Security (FAFS)
- It is very short—a maximum of six pages
- It focuses on concept and issues, than on design
- It is prepared as an identification of possible interventions

TABLE OF CONTENTS OF THE TEMPLATE

1. Key food security issues and rationale for proposed intervention
2. Proposed development objective(s)
3. Proposed instruments
4. Preliminary description
5. Potential risks and mitigation measures
6. Proposed preparation schedule, team composition, and resource estimate

GUIDELINES

Content and structure of the initial proposal

Length: The proposal cannot exceed the equivalent word count of six (6) pages in 12 point, single-spaced text, excluding the Cover Sheet and annexes. For your guidance, the table below provides a suggested length for each section. Documents exceeding this length will make the comparison and discussion with other countries difficult, and won't help the activities of the workshop.

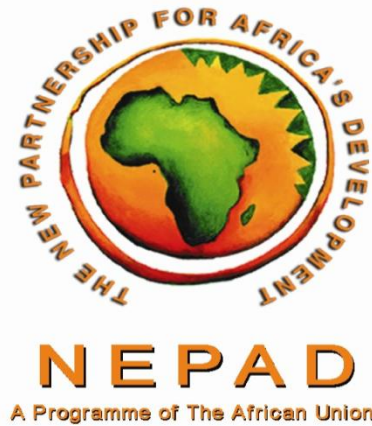
Content: The middle column of the table below gives “typical” questions to be answered in each section. The questions are not intended as a mandatory checklist. Writers may give more emphasis to certain

questions over others and may slightly alter the sequence of the answers, if they strongly think that this would best fit their needs.

Section Name	Typical Questions to be Answered in Each Section	Suggested Length
1 Key food security issues and rationale for proposed intervention/s or intervention packages	<ul style="list-style-type: none"> a. What is the current food security situation with respect to: (i) Food supply, (ii) food availability, (iii) nutrition, and (iv) emergency response system? b. How would the proposed operation support the country's objectives, policies, and strategies related to these issues? We will need to know what these are to judge this? c. What is the evidence of the country's commitment to and ownership of the relevant policies and strategies? d. What is the status (if any) of the CAADP roundtable process in the country? e. How would the proposed operation support the relevant CAADP objective(s)? If the operation is not aligned to any CAADP objective, explain. f. What analytical work already exists that could provide evidence-based analysis of the problems and possible solutions? g. What are the main lessons from previous and ongoing projects and activities? h. What are other government ministries and development partners doing, and how do their activities affect this proposal? i. What can the operation accomplish that cannot be accomplished by other means or other sources of funding? j. What is the evidence of the country's (i) interest in investing in this operation, (ii) borrowing for this operation and (iii) preparedness to work on preparation of ?? 	One to two pages
2 Propose development objective(s) and intermediate outcomes	<p>If the intervention package is successful, what will be its principal outcome for the primary target group? <i>See Annex 1 for guidelines on the development objective</i></p>	Half a page to one page
3 Propose instrument(s)	<p>What lending instrument/s is proposed and why; or what alternative instrument/s are being considered? Specify the type or combination of instrument(s):</p> <ul style="list-style-type: none"> a. Budget support, Policy lending, Technical assistance, Investment project, etc. 	Half a page
4 Preliminary description	<ul style="list-style-type: none"> b. What are the alternative development interventions or approaches being considered? If an approach is favoured, what is the rationale for it? c. If the proposed operation is to support a sector program, what would be the key elements of the program and how 	One to two pages

Section Name	Typical Questions to be Answered in Each Section	Suggested Length
	<p>would the proposed intervention fit into it?</p> <p>d. What components are being considered? Please provide a short description.</p> <p>e. What are the indicative costs per component (or even sub-component)?</p> <p>f. Are there already perspectives of (co)-financing with donor agencies?</p> <p>g. What is the government contribution to the program?</p> <p>h. What are the proposed implementation mechanisms, including M&E?</p>	
5 Potential risks and mitigation	<p>a. What are the risks that might prevent the development objective(s) from being achieved, including but not limited to political, policy-related, social/stakeholder-related, macro-economic, or financial?</p> <p>b. What is the evidence of institutional capacity on the part of the government to handle preparation and implementation of the proposed intervention?</p> <p>c. What relevant risks have been identified through predecessor operations or from poverty, social, financial management and procurement assessments? How might they be addressed in the proposed intervention? Might any new assessments be needed?</p> <p>d. Would any stakeholders feel that their interests are threatened by the intervention? How might the related risks be mitigated?</p> <p>e. Which safeguard policies might apply to the proposed intervention and in what ways? What actions might be needed during preparation to assess safeguard issues and prepare to mitigate them? How might consultation and disclosure be addressed?</p>	Half a page
6 Proposed preparation schedule, skills, resource estimate	<p>a) What is the proposed timetable of key steps in the preparation process</p> <p>b) What type of studies and skills are needed to fully prepare this intervention?</p> <p>c) What is the timing for the preparation of the intervention?</p> <p>d) What is the estimated cost of preparation?</p> <p>e) What is the readiness for preparing this intervention?</p> <p>f) Who are the members of the preparation team? What capacity issues, if any, are there?</p>	Half a page

APPENDIX D: Request letter and a Survey questionnaire



RE: Request for information on your country's responses to high food prices

Dear Colleagues,

Since our consultative meeting on the escalating food prices in May 2008, many follow-up activities have been initiated. Indeed, your support has been paramount in recording many positive developments at national, regional and continental levels. NEPAD is collating information on country responses to high food prices in order to assess best practices at country level.

Please can you assist with providing information regarding your country initiatives and experience? We are most interested in the information included in the attached survey form. Representatives from the African Centre for Food Security (lead institution for CAADP Pillar 3) will contact you soon to interview key stakeholders.

Thank you for the continued efforts to fight hunger and poverty in Africa.

Yours Sincerely,


Richard Mkandawire
NEPAD Advisor: Agriculture

Survey on progress and country responses to the high food prices

Name of Country: -----

Name of person responding to survey and designation:

1. Who in your country coordinates food security activities and policy?

2. Did this body exist before high food prices or not? Why were they formed?

3. What are the major challenges faced in addressing high food prices in your country?

4. What are the country's actions (interventions) in dealing with the high food prices? Please classify them as:

- **Immediate intervention(s) enacted in 2008**

- **Short term intervention(s)**

- **Medium term intervention(s)**

- **Long term intervention(s)**

5. What are the country's priorities in this area? Are there any documents setting out these priorities?

6. Who is partnering government in the above actions (interventions)?

7. What does your country prioritise as food? i.e. what food commodities is your country focusing on in responding to high food prices? e.g. Rice, maize etc.

8. What are pricing changes for these prioritised food commodities?

9. What are pricing changes for inputs such seeds and fertilisers and what initiatives are there to help poor farmers with high inputs prices?

10. Food subsidisation: Do government subsidise some of the food commodities in response to high food prices?

11. Trade issues: Are there any trade barriers that have been instituted due to high food prices?

12. What is your country's agricultural budget (%) allocation (e.g. 4%, 6%, etc)?

13. Is there funding (in-country or donor) for any of the activities related to high food prices?

Yes No

Give brief Comment (specify who gave the support) here and provide details of support in the attached table.

14. Do you know about CAADP? If yes please explain how you know about it?

15. Please indicate to what extent the funding is used for Comprehensive Africa Agriculture Development Programme (CAADP) activities?

16. What support is required to implement the above programmes or interventions?

APPENDIX E: The full list of programmes proposed at the May 2008 AU/NEPAD high food price workshop

ETHIOPIA

BACKGROUND				
Food Importing? Usually (yes/no) 2008-09 (yes/no)	YE S			
Expected Cereal Imports 2008-09	Total cereal consumption ^{a)} : 9,666,000 MT Root & tuber consumption ^{b)} : 4,230,000 MT Average cereal imports 2003-05 ^{b)} : 1,527,600 MT (mainly wheat) Wheat:			
Causes of Food Insecurity	<ul style="list-style-type: none"> • Low agricultural productivity • Drought • Poor market infrastructure 			
Impact of Food and Fuel Price rises	<ul style="list-style-type: none"> • Increased cost of imported inputs, especially fertilizer • Increased vulnerability of rural poor net food buyers 			
Main Framework Strategies/Policies/ Programmes	<ul style="list-style-type: none"> • Agricultural Development-Led Industrialization (ADLI) • Plan for Accelerated Sustainable Development to End Poverty (PASDEP) • Safety Net Programme • Grain Trade Agency 			
Early Warning System	<ul style="list-style-type: none"> • Yes 			
Programme Development Objectives	<ul style="list-style-type: none"> • To enhance the government action to reduce vulnerability over the short to medium term of the current high prices, for the benefit of: <ul style="list-style-type: none"> • Urban poor • Rural food insecure • Farmers 			
PROGRAMME				
		Short/Med /Long	Scale	Cost (\$ million)
1. Risk Management	<ul style="list-style-type: none"> • Strengthen collection and dissemination of data on vulnerability through capacity building and refining content, timeliness 	M	National	0.5

2. Enhanced Supply	<ul style="list-style-type: none"> • Enhancing government capacity to procure fertilizer • Importing adapted certified seed & animal germplasm • Assisting vulnerable farmers through a purchasing power support (PPS) voucher system • Improving availability of agricultural implements for vertisols • Empowering farmers' and consumers' organizations by 	S	National	300.0
		S	National	3.0
		S	National	37.0
		S	National	0.1
		M	National	1.0
	<p>access to capital and training, especially grain and input marketing organizations and consumer cooperatives</p> <ul style="list-style-type: none"> • Increasing farmers' capacity to produce seed • Supply small irrigation equipment • Improve feed and fodder supply in pastoral areas • Establish fertilizer blending facilities • Seek cheaper source of phosphate fertilizers 			0.5
		M	National	1.0
		M	National	3.0
		M	National	10.0
			National	0.5
		M	National	
4. Nutrition	<ul style="list-style-type: none"> • Targetted supplementary feeding programme for most vulnerable • Improve food quality through value addition and processing 	S	National	10.0
		L		5.0
			National	
	TOTAL NET RESOURCES			436.0
Risks & Mitigation	<ul style="list-style-type: none"> • Capacity of government agencies – procurement, financial management • Capacity development crucial 			
Instruments	<ul style="list-style-type: none"> • Government budget – now 25% for agriculture & food security • Aid • Budget support 			

KENYA

BACKGROUND				
Food Importing? Usually (yes/no) 2008-09 (yes/no)	NO YE			
Expected Cereal Imports 2008-09	Total cereal consumption ^{a)} : 3,876,000 MT Root & tuber consumption ^{a)} : 1,884,000 MT Average cereal imports 2003-05 ^{b)} : 867,500 MT (mainly wheat + maize & rice Wheat: Maize:			
Causes of Food Insecurity	<ul style="list-style-type: none"> • Low agricultural productivity • Drought • Poor market infrastructure 			
Impact of Food and Fuel Price rises	<ul style="list-style-type: none"> • Increased cost of imported inputs, especially fertilizer • Increased vulnerability of rural poor net food buyers 			
Main Framework Strategies/Policies/ Programmes	<ul style="list-style-type: none"> • Agricultural Recovery Programme • Kenya Food Security Meeting (KFSM) • Inter-Ministerial Coordinating Committee on Food & Nutrition (ICCFN) • Agriculture Sector Coordinating Unit (ASCU) • National Food Safety Coordinating Committee (NFSCC) • National Cereals & Produce Board (NCPB) • National Agricultural Accelerated Input Programme (NAAIP) 			
Early Warning System	<ul style="list-style-type: none"> • Yes 			
Programme Development Objectives	<ul style="list-style-type: none"> • To enhance the government action to reduce vulnerability over the short to medium term of the current high prices, for the benefit of: <ul style="list-style-type: none"> • Urban poor • Rural food insecure • Farmers 			
PROGRAMME				
		Short/Med /Long	Scale	Cost (\$ million)
1. Risk Management	• Mainstreaming risk management	S	National	0.04
	• Targeted input support – seed, fertilizer, livestock	S	National	12.3
	• Safety net programmes – orphan crop programme, livestock safety net programmes, ALLPRO livelihood support project	S/M	National	25.0
		S	National	
		M	National	
• Strategic grain reserve			[5.0]	
• Strengthen agriculture information systems, capacity building				
2. Enhanced Supply	• Dissemination of under-utilised technologies	S	National	

3. Enhanced Access	•			
4. Nutrition	• Development of Centre of	M	National	2.5
TOTAL NET RESOURCES				44.7
Risks & Mitigation	<ul style="list-style-type: none"> • Need for decentralization, adequate monitoring, capacity • Facilitate PPP to increase availability of inputs without disrupting markets 			
Instruments	<ul style="list-style-type: none"> • Government budget • Aid • Budget support 			

MALAWI

BACKGROUND				
Food Importing? Usually (yes/no) 2008-09 (yes/no)	YE S			
Expected Cereal Imports 2008-09	Total cereal consumption ^{a)} : 1,745,000 MT Root & tuber consumption ^{a)} : 2,185,000 MT Average cereal imports 2003-05 ^{b)} : 115,000 MT (mainly maize + wheat) Maize: Wheat:			
Causes of Food Insecurity	<ul style="list-style-type: none"> • Low agricultural productivity • Thin food markets • Poor market infrastructure 			
Impact of Food and Fuel Price rises	<ul style="list-style-type: none"> • Increased cost of imported inputs, especially fertilizer – doubling • Increased vulnerability of rural poor net food buyers • Disrupt gains in macro-economic stability 			
Main Framework Strategies/Policies/ Programmes	<ul style="list-style-type: none"> • Agricultural Development Programme (ADP) • Malawi Growth and Development Strategy (MGDS) • Consumer Price Subsidy • National Strategic Grain Reserve • Input Subsidy Programme 			
Early Warning System	<ul style="list-style-type: none"> • Yes 			
Programme Development Objectives	<ul style="list-style-type: none"> • To reduce the adverse impact of the soaring food prices on the poor rural and urban populations <ul style="list-style-type: none"> • Increase accessibility to inputs by poor farmers • Increase availability of food • Increase accessibility to food by rural masses and poor consumers • Enhance nutritional status of poor • Reduce food prices in short term 			
PROGRAMME				
		Short/Med /Long	Scale	Cost (\$ million)

1. Risk Management	<ul style="list-style-type: none"> Enhance capacity to implement market-based risk management instruments (small grain silos, warehouse receipts, village grain banks) Irrigation & water harvesting technologies Restock Strategic Grain Reserve Strengthen capacity of national vulnerability assessment through agricultural information system Increase direct transfers to vulnerable – cash, food, inputs, equipment) 	M	National	?
		M/L	National	?
		S	National	19.5
		S	National	2.1
		S	National	?
2. Enhanced Supply	<ul style="list-style-type: none"> Strengthen Input Subsidy Programme 	S	National	144.7
3. Enhanced Access	•			
4. Nutrition	<ul style="list-style-type: none"> Improve nutritional status 	S	National	?
TOTAL NET RESOURCES				169.1
Risks & Mitigation	•			
Instruments	<ul style="list-style-type: none"> Government budget Investment funding Policy lending Budget support Technical assistance 			

RWANDA

BACKGROUND

Food Importing? Usually (yes/no) 2008-09 (yes/no)	YE S
Expected Cereal Imports 2008-09	Total cereal consumption ^{a)} : 270,000 MT Root & tuber consumption ^{a)} : 2,963,000 MT Average cereal imports 2003-05 ^{b)} : 40,400 MT (maize, wheat) Maize:
Causes of Food Insecurity	<ul style="list-style-type: none"> Low agricultural productivity Poor market infrastructure
Impact of Food and Fuel Price rises	<ul style="list-style-type: none"> Increased cost of imported inputs, especially fertilizer Increased vulnerability of rural poor net food buyers
Main Framework Strategies/Policies/ Programmes	<ul style="list-style-type: none"> Economic Development and Poverty Reduction Strategy (EDPRS) Crop Intensification Programme
Early Warning System	• Yes
Programme Development Objectives	<ul style="list-style-type: none"> Increase agriculture productivity through increasing production and market linkages Accelerate rural economic development
PROGRAMME	

		Short/Med /Long	Scale	Cost (\$ million)
1. Risk Management	<ul style="list-style-type: none"> Strengthened market information system Communication through national and private radio stations Land husbandry, water harvesting and hillside irrigation project (LWH) 			200.0
2. Enhanced Supply	<ul style="list-style-type: none"> Special credit line for inputs Facilitate cooperative and private sector access to agriculture guarantee facility One Cow per Poor Family programme (safety net) 		S	14.0
			S	3.0
3. Enhanced Access	<ul style="list-style-type: none"> Help consumer cooperatives to own shops Cooperative development, storage and treatment, value addition and marketing Capacity building 		M	
			M	2.0
			M	3.0
4. Nutrition	•			
TOTAL NET RESOURCES				222.0
Risks & Mitigation	<ul style="list-style-type: none"> Financial and human capacity Dependence upon rainfed agriculture Market linkages Absence of insurance 			

UGANDA

BACKGROUND	
Food Importing? Usually (yes/no) 2008-09 (yes/no)	NO NO
Expected Cereal Imports 2008-09	Total cereal consumption ^{a)} : 1,551,000 MT Root & tuber consumption ^{a)} : 1,522,000 MT Average cereal imports 2003-05 ^{b)} : 384,300 MT (mainly wheat) Maize: Wheat:
Causes of Food Insecurity	<ul style="list-style-type: none"> Low agricultural productivity Poor market infrastructure
Impact of Food and Fuel Price rises	<ul style="list-style-type: none"> Increased cost of imported inputs, especially fertilizer Increased vulnerability of rural poor net food buyers
Main Framework Strategies/Policies/ Programmes	<ul style="list-style-type: none"> National Agricultural Advisory Service (NAADS) Plan for the Modernization of Agriculture (PMA)
Early Warning System	• Yes

Programme Development Objectives	<ul style="list-style-type: none"> To boost productivity and production, add value to agricultural products, find sustainable markets and maintain consistency around agricultural policies and institutions. 			
PROGRAMME				
		Short/Med /Long	Scale	Cost (\$ million)
1. Risk Management	<ul style="list-style-type: none"> By-laws in local government for production and storage of food security commodities Training for production and storage, capacity building Identify labour-saving technologies for women Input provision to women and youth farmers Explore establishment of national food reserve for maize and beans at regional level Establish functioning market information system Develop rural market infrastructure, soil & water conservation Improve market research and analysis 	M	National	2.5
		M	National	
		M	National	3.0
		S	National	
		M	National	6.0
		M	National	
		M/L	National	
		M	National	
2. Enhanced Supply	<ul style="list-style-type: none"> Increased access to improved seed and fertilizer: 			
	<ul style="list-style-type: none"> support private sector importation 	M/S	National	
		S	National	
3. Enhanced Access	<ul style="list-style-type: none"> Promote agro-processing industries 			
4. Nutrition	<ul style="list-style-type: none"> Promote diversification of 	M	National	
	TOTAL NET RESOURCES			27.5
Risks & Mitigation	<ul style="list-style-type: none"> Strengthen environment for private sector including PPP 			
Instruments	<ul style="list-style-type: none"> Government budget Aid Budget support 			

APPENDIX F: Poverty and malnutrition indicators from study countries

Poverty and malnutrition indicators collected from different reports or data sources

Country	Data		Reference year		National Poverty levels		Child malnutrition prevalence (% of under 5)		Underweight, Stunting and waiting levels of malnutrition			Prevalence of adult malnutrition		Incidence of poverty (\$1.25/day)		Proportion of population below minimum level of dietary energy consumption	
	Source	Year of data used	From	To	From	To	From	To	Underweight children under 5	Stunting children under 5	Wasting children under 5	From	To	From	To	From	To
Ethiopia	ReSAKSS (2010)		2007	2009	42	41	37	36				41	37	35	30		
	MDG (2010)/ UN (2011)		2004/2005	2009/2010	38.7	29.2			42.0 (2000) 34.6 (2005)							48.0 (2001)	41.0 (2007)
	MDG (2010) for Ethiopia		2004	2006					47.0 (2004) 40.5 (2006)								
	UNDP (2011)								47 (2004/2005) 41 (2005/2006)	8 (2004/2005) 5.9 (2005/2006)				3.9 (2011)			
	UNICEF (2011)								33*	51*	12*						
Kenya	ReSAKSS (2010)		2007	2009	47	47	19	19				31	31	17	14		
	MDG (2010)/ UN (2011)				52.3 (1997)	45.9 (2005)			16.5(2003) 16.4(2008)							33.0 (2001)	33.0 (2007)
	UNDP(2011)														19.7 (2011)		
	UNICEF (2011)			2011		46			16* 20 (2005/2006)	35* 33 (2005/2006)	7* 6 (2005/2006)						
Malawi	ReSAKSS (2010)		2007	2009	40	38	20	19				28	26	69	66		
	MDG (2010)/				40 (2007)	39 (2009)			14 (2007) 17 (2009)							30.0 (2001)	27.0 (2007)

Country	Data		Reference year		National Poverty levels		Child malnutrition prevalence (% of under 5)		Underweight, Stunting and waiting levels of malnutrition			Prevalence of adult malnutrition		Incidence of poverty (\$1.25/day)		Proportion of population below minimum level of dietary energy consumption	
	Source	Year of data used	From	To	From	To	From	To	Underweight children under 5	Stunting children under 5	Wasting children under 5	From	To	From	To	From	To
	UN (2011)																
	MICS(2006)								21 (2006)	46 (2006)	4 (2006)						
	UNICEF (2011)								15*	53*	4*						
Rwanda	ReSAKSS (2010)		2007	2009	57	58	22	20				34	33	-	-		
	MDG (2010)/ UN (2011)		2005/ 2006	2010**	56.9	40			19 (2006) 15.80 (2008)							38.0 (2001)	32.0 (2007)
	UNDP (2011)														76.8(2011)		
	UNICEF (2011)								18*	51*	5*						
Uganda	ReSAKSS (2010)		2007	2009	29	26	20	19				21	21	49	46		
	MDG (2010)/ UN (2011)				31.1 (2005)	24.5 (2009)			19.0 (2000) 16.4 (2006)							19.0 (2001)	22.0 (2007)
	UNDP (2011)														28.7(2011)		
	UNICEF (2011)								16*	38*	6*						

* Refers to 2003-2009 data, ** Represents projected percentage, () Represents the year that the figure was reported, # HESSEA 1991; IHS 1998, 2000; WMS 2005-2008 Adapted from <http://mdgs.un.org/unsd/mdgData.aspx>

APPENDIX G: Proportional (%) contribution of CIPs to FAFS element(s)

The proportional contribution of CIPs to FAFS elements was calculated as per the Ethiopia's example below. The same formula was used for all countries as done for Ethiopia to find the contribution of CIPs to each element of FAFS. In this example, the study used the contribution of CIPs to risk management programmes

Example for Ethiopia:

$$\begin{aligned} \text{Percentage contribution of CIP to FAFS element(s)} &= \frac{\text{No. of plans contributing to a FAFS element}}{\text{No. of CIPs contributing to a FAFS element}} \times 100 \\ &= \frac{13 \text{ risk management programmes}}{13 \text{ programmes proposed in the CIP}} \times 100 \\ &= 100\% \end{aligned}$$

APPENDIX H: Risk management options as set by FAFS

Immediate options for improving risk management

Options for improving early warning systems and crisis prevention

- Comprehensive risk assessments at national, district and community levels followed by the formulation of risk-reduction strategies at all administrative levels
- Facilitation of peer learning among African policymakers through the CRTs, based on best practices in policy design and implementation
- Invest in village level livestock disease monitoring, reporting and prevention mechanisms

Options for improving emergency responses

- Unconditional transfers of food, cash, and other items where appropriate
- Increased utilization of domestic and regional trade to stabilize food supplies (and prices) in affected markets

Options for strengthening risk management policies and institutions

- Immediate follow-up on country priority action areas in Hyogo Framework for Action

Medium term options for improving risk management

Options for improving early warning systems and crisis prevention

- Strengthening of sectoral information monitoring systems relevant to food and nutrition
- Institutionalization of food insecurity risk management systems at national, regional and continental levels

Options for improving emergency responses

- Development of broad-based logistics capacities, decentralizing functions where feasible
- Development of protocols to enhance coordination among government, civil society, and international humanitarian actors
- Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans

Options for strengthening risk management policies and institutions

- Formulation of improved risk management policies, including proactive review and use of alternative instruments to deal with crises, e.g., food and financial reserves, weather-based insurance and futures options
- Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans
- Establishment of objective criteria for selecting among resource transfer modalities, focusing on in-kind food and cash transfers
- Development of policies and institutions for improved management of food surpluses

Long term options for improving risk management

Options for improving early warning systems and crisis prevention

- Establishment of national, regional and Pan-African emergency response mechanisms including trans-boundary animal disease control
- Integration of local capacities and coping strategies into national and regional crisis preparedness strategies

Options for improving emergency responses

- Strengthening of logistics capacities

Options for strengthening risk management policies and institutions

- Development of broad-based social protection systems
- Strengthening of food security platforms within social protection systems